

TABLES

FOR THE

REDUCTION OF METEOROLOGICAL OBSERVATIONS IN INDIA:

TO ACCOMPANY

THE "INDIAN METEOROLOGIST'S VADE-MECUM."

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PREFATORY NOTE.

THE tables here given have been compiled for the especial use of Meteorological observers in India. Those for the reduction of the barometric readings to the freezing point and to sea-level, are old and well-known tables, which may be found in many other publications of a similar character.* But the hygrometric tables have all been recomputed and adapted to the mean latitude of 22°.† The computation of the vapour tension tables has been much facilitated by the use of that very valuable and ingenious instrument, the arithmometer, (the invention of M. Thomas de Colmar). The use of this instrument has admitted of the calculation of the differences being carried out to eight places of decimals, when three or four only were required for the tables, and without an appreciable increase of labour; and greater accuracy has thereby been secured.

For the computation of the tables for use with the psychrometer, I have preferred August's formula as corrected by Regnault, having found by experiments with Regnault's hygrometer in the dry atmosphere of the interior of India and at high temperatures, that the results computed by that formula are the most satisfactory.

* Table I is reprinted from Colonel James's 'Instructions,' which is more comprehensive than others.

† The relative humidity tables are the same for all latitudes.

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CORRIGENDA IN TABLES.

Page 3, line 23, for 0061, read 007.

“ 3, “ 23, “ 30×108 , read $30 + 108$.

“ 3, “ 24, “ $0064 \times 108 = 0006912$, read $007 \times 108 = 000756$.

“ 5, “ 15, “ 351, read 352.

“ 5, lines 18, 30 and 33, for 335, read 337.

“ 5, line 23, for Table IV, read Table V.

“ 6, “ 14, “ 706, read 705.

“ 18, 4th column, line 9, for 0.621, read 0.621.

The vapour tension for 7.6° .

“ 18, last column, line 9, for 2246, read 2846.

This is the vapour tension at 43.6° .

“ 19, column 14, for 1.9434, read 1.3434.

This is the vapour tension at 88.4° .

“ 22, $t' = 52^{\circ} t - t' = 2.5$, for 256, read 356.

“ 23, $t' = 40^{\circ} t - t' = 17.5$, “ 0.19, “ 0.19.

“ 27, $t' = 67^{\circ} t - t' = 19.5$, “ 412, “ 402.

“ 27, $t' = 72^{\circ} t - t' = 26.5$, “ 427, “ 429.

“ 51, $t' = 70^{\circ} t - t' = 4^{\circ}, 4.5^{\circ}, 5^{\circ}$, insert omitted numbers 81, 79, 77.

“ 51, $t' = 76^{\circ} t - t' = 0$, for 110, read 100.

“ 52, $t' = 72^{\circ} t - t' = 15.5$, “ 4, “ 45.

“ 77, $t' = 32^{\circ} t - t' = 17.5$, “ 5, “ 1.

N. B.—The above corrections should be made in ink in the Tables, before they are used.

T A B L E S
FOR THE
REDUCTION OF METEOROLOGICAL OBSERVATIONS IN INDIA.

USE OF THE TABLES.

TABLE I gives the corrections to be applied to the actual reading of a barometer with a brass scale at any given temperature, in order to find the height of the column exerting the same pressure at the temperature of melting ice. The formula by which such a table is computed is given at page 15.

If the reading of the barometer is within $+ 0.1$ or $- 0.1$ of the value at the top of any column, find, in the first column, the temperature corresponding to that of the attached thermometer, and the figures in that line in the column of the observed pressure, is the correction. This is to be deducted if the temperature is above 28° , and to be added if below 29° .

If the barometer reading is not within 0.1 of the value which heads one of the columns, but the temperature of the attached thermometer is in integral degrees, the correction is found by interpolation according to the following rule:—

Rule.—*When the barometric reading to be reduced is intermediate between two values represented by columns in the Table, take from the Table the corrections for the pressures next above and below the reading; multiply the difference of these corrections by twice the difference of the barometric reading to be reduced and the lower of the tabular headings. The result, added to the tabular correction for the lower tabular pressure, gives the correction required.*

EXAMPLE.—Let the barometric reading be 29.720 and the temperature of the attached thermometer 85° ,

From table with arguments 29.5 and 85 take $- 0.149$
Ditto ditto 30.0 and 85 take $- 0.151$

Difference $\underline{\underline{- 0.002}}$

$$\begin{array}{rcl} 29.720 & - 29.5 & = 0.220 \\ - .002 & \times .440 & = - .00088 \\ - (.149 + .00088) & = - .14988 \end{array}$$

instead of which we take $- .150$

$$\begin{array}{r} 29.720 \\ - .150 \\ \hline \end{array}$$

$29.570 = \text{reduced reading.}$

If the reading of the attached thermometer is within $+ 0.2$ or $- 0.2$ of an integral degree, the tabular correction for the integral degree may be taken. Otherwise, when great accuracy is required, a value is to be found by interpolation according to the rule above given, substituting the words 'thermometric' for 'barometric,' 'temperature' for 'pressure,' 'lines' for 'columns,' &c., and omitting the word 'twice' in the fourth line.

If neither the reading of the barometer nor that of the attached thermometer corresponds to those given in the tables within the limits already assigned, then a double process of interpolation is requisite, thus—

EXAMPLE.—Let the barometer reading be 29.720 and that of the attached thermometer 85.6.

Having found, as above, the correction —14988 for temperature 85°, obtain that for 86° by a similar process. This is found to be .15232. The difference is .00244.

$$\begin{array}{rcl}
 .00244 \times 0.6 & = & .001464 \\
 -(14988 + .001464) & = & -151344 \\
 \text{instead of which we take} & - & .151 \\
 29.720 & & \\
 - & .151 & \\
 \hline
 29.569 & = \text{reduced reading.}
 \end{array}$$

In general, interpolation for fractions of a degree is an unnecessary refinement.

TABLE II.—This table gives the height of the column of mercury, at 32° Fahrenheit, the weight of which equals that of a column of air of a given height and temperature, when the pressure at the sea-level is 30 inches. It is used for reducing to their equivalent values at sea-level, the barometric readings recorded at stations not more than 500 feet above that level.

To use the table, look down the first column for the value expressing the ascertained elevation of the barometer cistern; and along the headings of the subsequent columns for the temperature corresponding to the observed temperature of the external air (not that of the attached thermometer). At the intersection of that line and column, will be found the figures expressing the decimals of an inch, which are to be added to the barometric reading (previously reduced for temperature) to give its sea-level equivalent.

If this sea-level value is 30 inches, no further operation is required; but if it be less or more than 30 inches, a further correction is to be applied, which is obtained from the right-hand column. Let the value obtained by the first process be 30— d . Multiply by d the figures in the last column, on the line of the given elevation, and deduct the product from the value first found. If d is positive,—that is, if the value first found is higher than 30 inches,—then the correction is to be added.

EXAMPLE.—Required to find the sea-level equivalent of 29.403 (reduced reading) at a station 240 feet above the sea, the temperature of the external air being 80°.

With the arguments 240 feet (first column) and 80° (heading of column), take out the tabular value .248:

$$\begin{array}{r}
 29.403 \\
 - .248 \\
 \hline
 29.651
 \end{array}$$

$$29.651 = 30 - .349$$

The value in the last column on line 240 feet is .009

$$.009 \times .349 = .003141$$

instead of which we take .003 and deduct

$$\begin{array}{r}
 29.651 \\
 - .003 \\
 \hline
 29.648
 \end{array}$$

which is the sea-level value required.

If the temperature of the air and the elevation of the barometer are intermediate between the tabular values given, the correction is obtained by interpolation, as in the case of the previous table.

EXAMPLE.—Required the sea-level value of 29.916 at a station 184 feet above the sea-level, the temperature of the external air being 73°.

In line 180 and columns 70 and 80, take out the values .189 and .185; the difference is —.004 for the higher temperature :

$$\begin{array}{r} - .004 \times 3 \frac{4}{10} = - .00136 \\ .189 - .00136 = .18764 \end{array}$$

which is the correction for 180 feet.

In line 190 and columns 70° and 80°, take out .200 and .196; difference = —.004, as before :

$$.200 - .00136 = .19864$$

which is the correction for 190 feet.

$$\begin{array}{r} .19864 - .18764 = .011 \\ .011 \times 4 \frac{4}{10} = .0044; \end{array}$$

which is the correction of 4 feet: adding this to the value found for 180 feet

$$\begin{array}{r} .18764 \\ .0044 \\ \hline .19204 \end{array}$$

instead of which we take .192

$$\begin{array}{r} 29.916 \\ .192 \\ \hline 30.108 \end{array}$$

The value for 184 feet in the last column (obtained by interpolation between those for 180 and 190 feet) is .0064; and

$$30.108 = 30 \times .108$$

$$.0064 \times .108 = .0006912;$$

instead of which we take .001

$$\begin{array}{r} 30.108 \\ .001 \\ \hline 30.109 \end{array}$$

which is the sea-level value required.

It saves much trouble if a table is computed once for all for each station by the method above given; so that (the elevation being constant) the correction required may be taken out at once for a given pressure and temperature. The following is given as an example of such a table. It is for the observatory at Goalpara, where the barometer cistern is 386 feet above mean sea-level:—

Air temp.	Barometer reading.					Air temp.	Barometer reading.				
	29.0	29.2	29.4	29.6	29.8		29.0	29.2	29.4	29.6	29.8
40	.424	.427	.429	.432	.435	55	.410	.413	.416	.419	.421
41	.423	.426	.428	.431	.434	56	.409	.412	.415	.418	.421
42	.422	.425	.427	.430	.433	57	.408	.411	.414	.417	.420
43	.421	.424	.426	.429	.432	58	.408	.410	.413	.416	.419
44	.420	.423	.425	.428	.431	59	.407	.409	.412	.415	.418
45	.419	.422	.425	.427	.430	60	.406	.409	.411	.414	.417
46	.418	.421	.424	.427	.429	61	.405	.408	.411	.413	.416
47	.417	.420	.423	.426	.429	62	.404	.407	.410	.413	.415
48	.416	.419	.422	.425	.428	63	.403	.406	.409	.412	.414
49	.415	.418	.421	.424	.427	64	.402	.405	.408	.411	.414
50	.415	.417	.420	.423	.426	65	.402	.404	.407	.410	.413
51	.414	.416	.419	.422	.425	66	.401	.404	.406	.409	.412
52	.413	.415	.418	.421	.424	67	.400	.403	.405	.408	.411
53	.412	.415	.417	.420	.423	68	.399	.402	.405	.407	.410
54	.411	.414	.417	.419	.422	69	.398	.401	.404	.407	.409

Such a table should, of course, be extended to such limits of temperature and pressure as will comprehend the highest and lowest readings recorded at the station; and it may be further elaborated by interpolating the values for the alternate tenths of an inch, &c., according to convenience.

It is to be observed, in the use of all such tables, that the external temperature refers, strictly speaking, to the mean temperature of the column of air below the station down to sea-level. This may be obtained by adding 0.1 for every 90 feet of elevation to the air temperature observed at the station. But the correction thus introduced is scarcely appreciable in the result.

The table cannot be used for elevations greater than 500 feet. At higher stations it is better to use the table based on Laplace's barometric formula, which has been computed by Captain Allen Cunningham, R.E., published in the Roorkee Professional Papers on Indian Engineering, second series, No. CXIII.

TABLE III.—This table gives the tension of saturated aqueous vapour, in decimals of an inch of mercury at the temperature 32° , in latitude 22° , at the level of the sea. It has been reduced from the original table for the latitude of Dublin, computed by the Rev. Robert Dixon; by correcting his values for the difference of gravity, *viz.*, multiplying them by the constant factor 1.00286184.

The psychrometric tables which follow are all based on this table, and the computation has been chiefly made by the aid of the arithmometer.

The chief use of this table is in computing the humidity and vapour tension, from observations of the dry and wet bulb thermometers, by August's or Apjohn's formula; and for finding the dew point corresponding to that vapour tension.

August's formula, which has been used in computing the Tables IV to XI, is as follows:—

For temperatures of the *wet* bulb below 32° ,

$$x = f' - \frac{480(t-t')}{1210^2 - t'}$$

and for temperatures of *wet* bulb above 32°

$$x = f' - \frac{480(t-t')}{1130 - t'} h$$

wherein t and t' are the temperatures of the dry and wet bulb thermometers respectively, in Fahr. degrees, f' the tension of vapour at temperature t' , h the reading of the barometer in inches, and x the tension of the vapour present in the air at the time of the observation.

The value of f' corresponding to t' is given by Table III, taking t' as the argument; and when x has been computed, the temperature which, in Table III, corresponds to x , is that of the dew point.

EXAMPLE.—Required the vapour tension and dew point of the atmosphere when the readings of the dry and wet bulb thermometers are $98^{\circ}1$ and $63^{\circ}4$, and the barometer reading (reduced to 32°) 29.763 .

Here $t = 98^{\circ}1$, $t' = 63^{\circ}4$, and $(t-t') = 34^{\circ}7$, $h = 29.763$ and, from the table, $f' = .5953$

$$x = .5953 - \frac{480 \times 34^{\circ}7}{1130 - 63^{\circ}4} 29.763 = .1305$$

which is the vapour tension required.

The temperature in the table, corresponding to $.1304$, is $24^{\circ}4$. This, therefore, is the computed dew point of the air at the time of the observation.

Tables IV, VI, VIII and X are given to save the trouble of calculation, and show at once the vapour tension corresponding to any given readings of the dry and wet bulb thermometers, when the pressures are respectively 29.7 , 27.7 , 25.8 and 23.4 , these being the average pressures at stations (IV) at and near the sea-level, (VI) at 2,000 feet, (VIII) at 4,000 feet and (X) at 7,000 feet respectively. For all ordinary

purposes the vapour tensions thus computed to a constant mean barometric pressure are sufficiently exact.

The use of the tables is very simple. Having corrected the readings of the dry and wet bulb thermometers for their errors of graduation, deduct that of the wet bulb t' from that of the dry bulb t . Then, in the left-hand column of the table, look out the temperature of the wet bulb, and in that line and in the column the heading of which is the difference $t-t'$ will be found the vapour tension required.

EXAMPLE.—At Házáribágh 2,010 feet above sea-level, the corrected temperature of the dry bulb is 103.2 and that of the wet bulb 70.5. Required the vapour tension.

$$\begin{aligned} \text{Here } t-t' &= 32.7 \\ t' &= 70.5 \end{aligned}$$

and the station being 2,010 feet above sea-level, we use Table VI.

By the table in line 70° and column 32.5, vapour tension = .327

Ditto 70° ditto 33 ditto = .321

Ditto 71° ditto 32.5, ditto = .351

Ditto 71° ditto 33 ditto = .346

from which four values, by interpolating for the tenths of degrees in the manner already shown for the barometric Table I, we obtain .335, which is the vapour tension required.

These tables, together with Table III, may be used to find the dew point of the air from observations of the dry and wet bulb thermometers. Having found the tension of vapour in the air by the help of the former, turn to Table III, and the temperature corresponding to that tension is the dew point required.

Tables IV, VII, IX and XI are used in the same way as the foregoing, and give the relative humidity of the air corresponding to any observed temperatures of the dry and wet bulb thermometers for the same four values of mean pressure.

By the 'relative humidity' of the air is understood the proportion which the weight of water vapour present in the air bears to that which would saturate it at the temperature of the dry bulb. This, by Boyle's law, is directly as the proportion which the actual vapour tension bears to that of saturation, and the ratio is expressed as a percentage of the latter. Thus, in the example above given, .335 is the actual vapour tension, and, by extending Table III up to the temperature of 103.2, we find that the vapour tension of saturation at that temperature is 2.1156. Hence the relative humidity

$$\frac{.335 \times 100}{2.1156} = 16 \text{ nearly}$$

which is the number given in Table VII for wet bulb temperature 70.5, and a difference of 32.7.

Table XII shows the weight of vapour (in Troy grains) in a cubic foot of air at different temperatures, when the vapour tension is given, the vapour tensions being expressed in terms of the gravitation of a column of mercury in latitude 22° . In computing this table, I have assumed the weight of a cubic foot of dry air at 30 inches pressure (in the latitude of Dublin), and at 32° Fahrenheit, to be 563 grains; and that water vapour weighs $\frac{9}{14.15}$ as much as dry air at the same pressure and temperature. Also, I have taken the expansion of water vapour at the same value as that of air, *viz.*, $\frac{1}{493}$ of the volume at 32° for each degree Fahrenheit. Hence at any temperature t the weight x of one cubic foot of vapour at pressure p is

$$\begin{aligned} & \frac{563 \times 493}{461 + t} \times \frac{9}{14.15} \times 30 \times 1.00286 \\ &= 5746.037 \frac{p}{461 + t} \end{aligned}$$

The values have been computed for even thousandths, hundredths and tenths of an inch, and for one and two inches of pressure; and for the temperature of the

freezing point and successive decrements and increments of 5 degrees between 2° and 127° ; by the addition of which, the weights corresponding to all pressures up to 3 inches may be easily calculated.

EXAMPLE.—The tension of vapour in the air is found to be 6.79, and the temperature 93° . What is the weight of vapour in the cubic foot?

For 6 take 6.23 and 6.18, which are the values for that pressure in the columns for 92° and 97° ; for .07 the tensions 0.73 and 0.72 from the same columns; and for .009 the value 0.09 from the same columns. Then, adding separately for the two temperatures—

$$\begin{array}{r} 6.23 \quad 6.18 \\ .73 \quad .72 \\ .09 \quad .09 \\ \hline 7.05 \quad 6.99 \end{array}$$

the sums 7.05 and 6.99 represent the weights corresponding to 92° and 97° . The difference is 0.06. One-fifth of this deducted from 7.06, or four-fifths added to 6.99, gives 7.04 grains for the temperature 93° ; which is the answer required.

TABLE I,
For reducing Observations of the Barometer to the Temperature of 32° Fahrenheit.

This Table is applicable only to Barometers with Brass Scales.

TABLE I,
For reducing Observations of the Barometer to the Temperature of 32
Fahrenheit—(continued).

Tempera-ture, Fahrenheit.	REDUCTION OF THE BAROMETER TO 32° FAHRENHEIT.												Tempera-ture, Fahrenheit.	
	HEIGHT OF THE BAROMETER IN INCHES, AND CORRECTION IN DECIMALS OF AN INCH.													
	13°5	14°0	14°5	15°0	15°5	16°0	16°5	17°0	17°5	18°0	18°5	19°0		
30	—.002	—.002	—.002	—.002	—.002	—.002	—.002	—.002	—.002	—.002	—.002	—.003	30	
31	.003	.003	.003	.003	.003	.003	.004	.004	.004	.004	.004	.004	31	
32	.004	.004	.005	.005	.005	.005	.005	.005	.005	.006	.006	.006	32	
33	.005	.006	.006	.006	.006	.006	.007	.007	.007	.007	.007	.008	33	
34	.007	.007	.007	.007	.008	.008	.008	.008	.009	.009	.009	.009	34	
35	.008	.008	.008	.009	.009	.009	.010	.010	.010	.010	.011	.011	35	
36	.009	.009	.010	.010	.010	.011	.011	.011	.012	.012	.012	.013	36	
37	.010	.011	.011	.011	.012	.012	.013	.013	.013	.014	.014	.014	37	
38	.011	.012	.012	.013	.013	.014	.014	.014	.015	.015	.016	.016	38	
39	.013	.013	.014	.014	.015	.015	.016	.016	.016	.017	.017	.018	39	
40	—.014	—.014	—.015	—.015	—.016	—.016	—.017	—.018	—.018	—.019	—.020	—.020	40	
41	.015	.016	.016	.017	.017	.018	.018	.019	.020	.020	.021	.021	41	
42	.016	.017	.018	.018	.019	.019	.020	.021	.021	.022	.022	.023	42	
43	.018	.018	.019	.019	.020	.021	.021	.022	.023	.023	.024	.025	43	
44	.019	.019	.020	.021	.022	.022	.023	.024	.024	.025	.026	.026	44	
45	.020	.021	.021	.022	.023	.024	.024	.025	.026	.027	.027	.028	45	
46	.021	.022	.023	.023	.024	.025	.026	.027	.027	.028	.029	.030	46	
47	.022	.023	.024	.025	.026	.026	.027	.028	.029	.030	.031	.031	47	
48	.024	.024	.025	.026	.027	.028	.029	.030	.031	.031	.032	.033	48	
49	.025	.026	.027	.028	.028	.029	.030	.031	.032	.033	.034	.035	49	
50	—.026	—.027	—.028	—.029	—.030	—.031	—.032	—.033	—.034	—.035	—.036	—.037	50	
51	.027	.028	.029	.030	.031	.032	.033	.034	.035	.036	.037	.038	51	
52	.028	.029	.030	.032	.033	.034	.035	.036	.037	.038	.039	.040	52	
53	.030	.031	.032	.033	.034	.035	.036	.037	.038	.039	.041	.042	53	
54	.031	.032	.033	.034	.035	.036	.038	.039	.040	.041	.042	.043	54	
55	.032	.033	.034	.036	.037	.038	.039	.040	.041	.043	.044	.045	55	
56	.033	.034	.036	.037	.038	.039	.041	.042	.043	.044	.046	.047	56	
57	.034	.036	.037	.038	.040	.041	.042	.043	.045	.046	.047	.048	57	
58	.036	.037	.038	.040	.041	.042	.044	.045	.046	.047	.049	.050	58	
59	.037	.039	.040	.041	.042	.044	.045	.046	.048	.049	.050	.052	59	
60	—.038	—.039	—.041	—.042	—.044	—.045	—.047	—.048	—.049	—.051	—.052	—.054	60	
61	.039	.041	.042	.044	.045	.046	.048	.049	.051	.052	.054	.055	61	
62	.040	.042	.043	.045	.046	.048	.049	.051	.052	.054	.055	.057	62	
63	.042	.043	.045	.046	.048	.049	.051	.052	.054	.055	.057	.059	63	
64	.043	.044	.046	.048	.049	.051	.052	.054	.056	.057	.059	.060	64	
65	.044	.046	.047	.049	.051	.052	.054	.055	.057	.059	.060	.062	65	
66	.045	.047	.049	.050	.052	.054	.055	.057	.059	.060	.062	.064	66	
67	.046	.048	.050	.052	.053	.055	.057	.058	.060	.062	.064	.065	67	
68	.048	.049	.051	.053	.055	.056	.058	.060	.062	.064	.065	.067	68	
69	.049	.051	.052	.054	.056	.058	.060	.062	.063	.065	.067	.069	69	

TABLE I,
For reducing Observations of the Barometer to the Temperature of 32°
Fahrenheit—(continued).

Tempera- ture, Fahrenheit.	REDUCTION OF THE BAROMETER TO 32° FAHRENHEIT.												Tempera- ture, Fahrenheit	
	HEIGHT OF THE BAROMETER IN INCHES AND CORRECTION IN DECIMALS OF AN INCH.													
	13°5	14°0	14°5	15°0	15°5	16°0	16°5	17°0	17°5	18°0	18°5	19°0		
0													0	
70	—.050	—.052	—.054	—.056	—.057	—.059	—.061	—.063	—.065	—.067	—.069	—.070	70	
71	.051	.053	.055	.057	.059	.061	.062	.065	.066	.068	.070	.072	71	
72	.052	.054	.056	.058	.060	.062	.064	.066	.068	.070	.072	.074	72	
73	.054	.056	.058	.060	.062	.064	.066	.068	.070	.072	.074	.076	73	
74	.055	.057	.059	.061	.063	.065	.067	.069	.071	.073	.075	.077	74	
75	.056	.058	.060	.062	.064	.066	.068	.071	.073	.075	.077	.079	75	
76	.057	.059	.062	.064	.066	.068	.070	.072	.074	.076	.078	.081	76	
77	.058	.061	.063	.065	.067	.069	.071	.074	.076	.078	.080	.082	77	
78	.060	.062	.064	.066	.068	.071	.073	.075	.077	.080	.082	.084	78	
79	.061	.063	.065	.068	.070	.072	.074	.077	.079	.081	.083	.086	79	
80	—.062	—.064	—.067	—.069	—.071	—.074	—.076	—.078	—.080	—.083	—.085	—.087	80	
81	.063	.066	.068	.070	.073	.075	.077	.080	.082	.084	.087	.089	81	
82	.064	.067	.069	.072	.074	.076	.079	.081	.084	.086	.088	.091	82	
83	.066	.068	.070	.073	.075	.078	.080	.083	.086	.089	.090	.092	83	
84	.067	.069	.072	.074	.077	.079	.082	.084	.087	.089	.092	.094	84	
85	.068	.071	.073	.076	.078	.081	.083	.086	.088	.091	.093	.096	85	
86	.069	.072	.074	.077	.079	.082	.085	.087	.090	.092	.095	.097	86	
87	.070	.073	.076	.078	.081	.083	.086	.089	.091	.094	.097	.099	87	
88	.072	.074	.077	.080	.082	.085	.088	.090	.093	.095	.098	.101	88	
89	.073	.076	.078	.081	.084	.086	.089	.092	.094	.097	.100	.103	89	
90	—.074	—.077	—.079	—.082	—.085	—.088	—.090	—.093	—.099	—.101	—.104	90		
91	.075	.078	.081	.084	.086	.089	.092	.095	.100	.103	.106	91		
92	.076	.079	.082	.085	.088	.091	.093	.096	.102	.105	.108	92		
93	.078	.080	.083	.086	.089	.092	.095	.098	.103	.106	.109	93		
94	.079	.082	.085	.088	.090	.093	.096	.099	.106	.108	.111	94		
95	.080	.083	.086	.089	.092	.095	.098	.101	.107	.110	.113	95		
96	.081	.084	.087	.090	.093	.096	.099	.102	.108	.111	.114	96		
97	.082	.085	.088	.092	.095	.098	.101	.104	.110	.113	.116	97		
98	.084	.087	.090	.093	.096	.099	.102	.105	.111	.115	.118	98		
99	.085	.088	.091	.094	.097	.100	.104	.107	.113	.116	.119	99		
100	—.086	—.089	—.092	—.096	—.099	—.102	—.105	—.108	—.111	—.115	—.118	—.121	100	
101	.087	.090	.094	.097	.100	.103	.107	.110	.113	.116	.119	.123	101	
102	.088	.092	.095	.098	.101	.105	.108	.111	.115	.118	.121	.124	102	
103	.090	.093	.096	.099	.103	.106	.109	.113	.116	.119	.123	.126	103	
104	.091	.094	.097	.101	.104	.108	.111	.114	.118	.121	.124	.128	104	
105	.092	.095	.099	.102	.106	.109	.112	.116	.119	.123	.126	.129	105	
106	.093	.097	.100	.103	.107	.110	.114	.117	.121	.124	.128	.131	106	
107	.094	.098	.101	.105	.108	.112	.115	.119	.122	.126	.129	.133	107	
108	.096	.099	.103	.106	.110	.113	.117	.120	.124	.127	.131	.134	108	
109	.097	.100	.104	.107	.111	.115	.118	.122	.125	.129	.132	.136	109	
110	.098	.102	.105	.109	.112	.116	.120	.123	.127	.130	.134	.138	110	

TABLE I.

For reducing Observations of the Barometer to the Temperature of 32° Fahrenheit—(continued).

TABLE I,

For reducing Observations of the Barometer to the Temperature of 32° Fahrenheit—(continued).

Tempera- ture, Fahrenheit.	REDUCTION OF THE BAROMETER TO 32° FAHRENHEIT.												Tempera- ture, Fahrenheit.	
	HEIGHT OF THE BAROMETER IN INCHES, AND CORRECTION IN DECIMALS OF AN INCH.													
	19°5	20°0	20°5	21°0	21°5	22°0	22°5	23°0	23°5	24°0	24°5	25°0		
0														
30	—.003	—.003	—.003	—.003	—.003	—.003	—.003	—.003	—.003	—.003	—.003	—.003	30	
31	.004	.005	.005	.005	.005	.005	.005	.005	.005	.005	.006	.006	31	
32	.006	.006	.006	.007	.007	.007	.007	.007	.007	.008	.008	.008	32	
33	.008	.008	.008	.008	.009	.009	.009	.009	.010	.010	.010	.010	33	
34	.010	.010	.010	.010	.011	.011	.011	.011	.012	.012	.012	.012	34	
35	.011	.012	.012	.012	.013	.013	.013	.013	.014	.014	.014	.015	35	
36	.013	.013	.014	.014	.014	.015	.015	.016	.016	.016	.017	.017	36	
37	.015	.015	.016	.016	.016	.017	.017	.018	.018	.018	.019	.019	37	
38	.017	.017	.017	.018	.018	.019	.019	.020	.020	.020	.021	.021	38	
39	.018	.019	.019	.020	.020	.021	.021	.022	.022	.023	.023	.024	39	
40	—.020	—.021	—.021	—.022	—.022	—.023	—.023	—.024	—.024	—.025	—.025	—.026	40	
41	.022	.022	.023	.024	.024	.025	.025	.026	.026	.027	.027	.028	41	
42	.024	.024	.025	.025	.026	.027	.027	.028	.028	.029	.030	.030	42	
43	.025	.026	.027	.027	.028	.029	.029	.030	.031	.031	.032	.032	43	
44	.027	.028	.029	.029	.030	.031	.031	.032	.033	.033	.034	.035	44	
45	.029	.030	.030	.031	.032	.033	.033	.034	.035	.035	.036	.037	45	
46	.031	.031	.032	.033	.034	.035	.035	.036	.037	.038	.038	.039	46	
47	.032	.033	.034	.035	.036	.036	.037	.038	.039	.040	.041	.041	47	
48	.034	.035	.036	.037	.038	.038	.039	.040	.041	.042	.043	.044	48	
49	.036	.037	.038	.039	.040	.040	.041	.042	.043	.044	.045	.046	49	
50	—.037	—.038	—.039	—.040	—.041	—.042	—.043	—.044	—.045	—.046	—.047	—.048	50	
51	.039	.040	.041	.042	.043	.044	.045	.046	.047	.048	.049	.050	51	
52	.041	.042	.043	.044	.045	.046	.047	.048	.049	.050	.052	.053	52	
53	.043	.044	.045	.046	.047	.048	.049	.050	.052	.053	.054	.055	53	
54	.044	.046	.047	.048	.049	.050	.051	.052	.054	.055	.056	.057	54	
55	.046	.047	.049	.050	.051	.052	.053	.055	.056	.057	.058	.059	55	
56	.048	.049	.050	.052	.053	.054	.055	.057	.058	.059	.060	.061	56	
57	.050	.051	.052	.054	.055	.056	.057	.059	.060	.061	.062	.064	57	
58	.051	.053	.054	.055	.057	.058	.059	.061	.062	.063	.065	.066	58	
59	.053	.055	.056	.057	.059	.060	.061	.063	.064	.065	.067	.068	59	
60	—.055	—.056	—.058	—.059	—.061	—.062	—.063	—.065	—.066	—.068	—.069	—.070	60	
61	.057	.058	.060	.061	.062	.064	.065	.067	.068	.070	.071	.073	61	
62	.058	.060	.061	.063	.064	.066	.067	.069	.070	.072	.073	.075	62	
63	.060	.062	.063	.065	.066	.068	.069	.071	.072	.074	.076	.077	63	
64	.062	.063	.065	.067	.068	.070	.071	.073	.075	.076	.078	.079	64	
65	.064	.065	.067	.068	.070	.072	.073	.075	.077	.078	.080	.082	65	
66	.065	.067	.069	.070	.072	.074	.075	.077	.079	.080	.082	.084	66	
67	.067	.069	.071	.072	.074	.076	.078	.079	.081	.083	.084	.086	67	
68	.069	.071	.072	.074	.076	.078	.079	.081	.083	.085	.086	.088	68	
69	.071	.072	.074	.076	.078	.080	.081	.083	.085	.087	.089	.090	69	

TABLE I,

For reducing Observations of the Barometer to the Temperature of 32° Fahrenheit—(continued).

Tempera- ture, Fahrenheit.	REDUCTION OF THE BAROMETER TO 32° FAHRENHEIT.												Tempera- ture, Fahrenheit.	
	HEIGHT OF THE BAROMETER IN INCHES, AND CORRECTION IN DECIMALS OF AN INCH.													
	19°5	20°0	20°5	21°0	21°5	22°0	22°5	23°0	23°5	24°0	24°5	25°0		
70	—.072	—.074	—.076	—.078	—.080	—.082	—.083	—.085	—.087	—.089	—.091	—.093	70	
71	.074	.076	.078	.080	.082	.083	.085	.087	.089	.091	.093	.095	71	
72	.076	.078	.080	.082	.084	.085	.087	.089	.091	.093	.095	.097	72	
73	.078	.079	.081	.083	.085	.087	.089	.091	.093	.095	.097	.099	73	
74	.079	.081	.083	.085	.087	.089	.091	.093	.095	.097	.099	.102	74	
75	.081	.083	.085	.087	.089	.091	.093	.095	.097	.100	.102	.104	75	
76	.083	.085	.087	.089	.091	.093	.095	.097	.100	.102	.104	.106	76	
77	.084	.087	.089	.091	.093	.095	.097	.100	.102	.104	.106	.108	77	
78	.086	.088	.091	.093	.095	.097	.099	.102	.104	.106	.108	.110	78	
79	.088	.090	.092	.095	.097	.099	.101	.104	.106	.108	.110	.113	79	
80	—.090	—.092	—.094	—.096	—.099	—.101	—.103	—.106	—.108	—.110	—.113	—.115	80	
81	.091	.094	.096	.098	.101	.103	.105	.108	.110	.112	.115	.117	81	
82	.093	.095	.098	.100	.103	.105	.107	.110	.112	.114	.117	.119	82	
83	.095	.097	.100	.102	.104	.107	.109	.112	.114	.117	.119	.121	83	
84	.097	.099	.101	.104	.106	.109	.111	.114	.116	.119	.121	.124	84	
85	.098	.101	.103	.106	.108	.111	.113	.116	.118	.121	.123	.126	85	
86	.100	.102	.105	.108	.110	.114	.115	.118	.120	.123	.126	.128	86	
87	.102	.104	.107	.109	.112	.115	.117	.120	.123	.125	.128	.130	87	
88	.103	.106	.109	.111	.114	.117	.119	.122	.125	.127	.130	.133	88	
89	.105	.108	.111	.113	.116	.119	.121	.124	.127	.129	.132	.135	89	
90	—.107	—.109	—.112	—.115	—.118	—.121	—.123	—.126	—.129	—.131	—.134	—.137	90	
91	.109	.111	.114	.117	.120	.122	.125	.128	.131	.134	.136	.139	91	
92	.110	.113	.116	.119	.122	.125	.127	.130	.133	.136	.139	.141	92	
93	.112	.115	.118	.121	.124	.126	.129	.132	.135	.138	.141	.144	93	
94	.114	.117	.120	.122	.125	.128	.131	.134	.137	.140	.143	.146	94	
95	.116	.118	.121	.124	.127	.130	.133	.136	.139	.142	.145	.148	95	
96	.117	.120	.123	.126	.129	.132	.135	.138	.141	.144	.147	.150	96	
97	.119	.122	.125	.128	.131	.134	.137	.140	.143	.146	.149	.152	97	
98	.121	.124	.127	.130	.133	.136	.139	.142	.145	.148	.152	.155	98	
99	.122	.125	.129	.132	.135	.138	.141	.144	.147	.151	.154	.157	99	
100	—.124	—.127	—.131	—.134	—.137	—.140	—.143	—.146	—.150	—.153	—.156	—.160	100	
101	.126	.129	.132	.136	.139	.142	.145	.148	.152	.155	.158	.161	101	
102	.128	.131	.134	.137	.141	.144	.147	.151	.154	.157	.160	.164	102	
103	.129	.133	.136	.139	.143	.146	.149	.153	.156	.159	.163	.166	103	
104	.131	.134	.138	.141	.144	.148	.151	.155	.158	.161	.165	.168	104	
105	.133	.136	.140	.143	.146	.150	.153	.157	.160	.163	.166	.169	105	
106	.135	.138	.141	.145	.148	.152	.155	.159	.162	.166	.169	.172	106	
107	.136	.140	.143	.147	.150	.154	.157	.161	.164	.168	.171	.175	107	
108	.138	.141	.145	.149	.152	.156	.159	.163	.166	.170	.173	.177	108	
109	.140	.143	.147	.150	.154	.158	.161	.165	.168	.172	.175	.179	109	
110	.141	.145	.149	.152	.156	.159	.163	.167	.170	.174	.178	.181	110	

TABLE I.

For reducing Observations of the Barometer to the Temperature of 32° Fahrenheit—(continued).

TABLE I,

For reducing Observations of the Barometer to the Temperature of 32° Fahrenheit—(continued).

Tempera- ture, Fahrenheit.	REDUCTION OF THE BAROMETER TO 32° FAHRENHEIT.												Tempera- ture, Fahrenheit.	
	HEIGHT OF THE BAROMETER IN INCHES, AND CORRECTION IN DECIMALS OF AN INCH.													
	25°5	26°0	26°5	27°0	27°5	28.0	28°5	29°0	29°5	30°0	30°5	31°0		
30°	—.004	—.004	—.004	—.004	—.004	—.004	—.004	—.004	—.004	—.004	—.004	—.004	30°	
31	.006	.006	.006	.006	.006	.006	.006	.007	.007	.007	.007	.007	31	
32	.008	.008	.008	.008	.009	.009	.009	.009	.009	.010	.010	.010	32	
33	.010	.011	.011	.011	.011	.011	.012	.012	.012	.012	.012	.012	33	
34	.013	.013	.013	.013	.014	.014	.014	.014	.015	.015	.015	.015	34	
35	.015	.015	.015	.016	.016	.016	.017	.017	.017	.018	.018	.018	35	
36	.017	.017	.018	.018	.019	.019	.019	.019	.020	.020	.021	.021	36	
37	.019	.020	.020	.021	.021	.021	.022	.022	.022	.023	.023	.024	37	
38	.022	.022	.023	.023	.023	.024	.024	.025	.025	.026	.026	.026	38	
39	.024	.024	.025	.025	.026	.026	.027	.027	.028	.028	.029	.029	39	
40	—.026	—.027	—.027	—.028	—.028	—.029	—.030	—.030	—.031	—.031	—.032	—.032	40	
41	.029	.029	.030	.030	.031	.031	.032	.033	.033	.034	.034	.035	41	
42	.031	.031	.032	.033	.033	.034	.034	.035	.036	.036	.037	.037	42	
43	.033	.034	.034	.035	.036	.036	.037	.038	.038	.039	.040	.040	43	
44	.035	.036	.037	.037	.038	.039	.040	.040	.041	.042	.042	.043	44	
45	.038	.038	.039	.040	.041	.041	.042	.043	.043	.044	.045	.046	45	
46	.040	.041	.042	.042	.043	.044	.045	.045	.046	.047	.048	.049	46	
47	.042	.043	.044	.045	.046	.046	.047	.048	.049	.050	.051	.051	47	
48	.045	.045	.046	.047	.048	.049	.050	.051	.052	.052	.053	.054	48	
49	.047	.048	.049	.050	.050	.051	.052	.053	.054	.055	.056	.057	49	
50	—.049	—.050	—.051	—.052	—.053	—.054	—.055	—.056	—.057	—.058	—.059	—.060	50	
51	.051	.052	.053	.054	.055	.056	.057	.058	.059	.060	.061	.062	51	
52	.054	.055	.056	.057	.058	.059	.060	.061	.062	.063	.064	.065	52	
53	.058	.057	.058	.059	.060	.061	.063	.064	.065	.066	.067	.068	53	
54	.068	.059	.060	.062	.063	.064	.065	.066	.067	.068	.070	.071	54	
55	.060	.062	.063	.064	.065	.066	.068	.069	.070	.071	.072	.073	55	
56	.063	.064	.065	.066	.068	.069	.070	.071	.073	.074	.075	.076	56	
57	.065	.066	.068	.069	.070	.071	.073	.074	.075	.076	.078	.079	57	
58	.067	.069	.070	.071	.073	.074	.075	.077	.078	.079	.081	.082	58	
59	.070	.071	.072	.074	.075	.076	.078	.079	.080	.082	.083	.085	59	
60	—.072	—.073	—.075	—.076	—.077	—.079	—.080	—.082	—.083	—.085	—.086	—.087	60	
61	.074	.075	.077	.078	.080	.081	.083	.084	.086	.087	.089	.090	61	
62	.076	.078	.079	.081	.082	.084	.085	.087	.088	.090	.091	.093	62	
63	.079	.080	.082	.083	.085	.086	.088	.089	.091	.093	.094	.096	63	
64	.081	.082	.081	.086	.087	.089	.090	.092	.094	.095	.097	.098	64	
65	.083	.085	.086	.088	.090	.091	.093	.095	.096	.098	.100	.101	65	
66	.085	.087	.089	.090	.092	.094	.096	.097	.099	.101	.102	.104	66	
67	.088	.089	.091	.093	.095	.096	.098	.100	.102	.103	.105	.107	67	
68	.090	.092	.091	.095	.097	.099	.101	.102	.104	.106	.108	.109	68	
69	.092	.094	.096	.098	.100	.101	.103	.105	.107	.109	.110	.112	69	

TABLE I,

For reducing Observations of the Barometer to the Temperature of 32° Fahrenheit—(continued).

Tempera- ture, Fahrenheit.	REDUCTION OF THE BAROMETER TO 32° FAHRENHEIT.												Tempera- ture, Fahrenheit.	
	HEIGHT OF THE BAROMETER IN INCHES, AND CORRECTION IN DECIMALS OF AN INCH.													
	25°5	26°0	26°5	27°0	27°5	28°0	28°5	29°0	29°5	30°0	30°5	31°0		
70°	-.005	-.008	-.008	-.100	-.102	-.104	-.106	-.108	-.100	-.111	-.113	-.115	70°	
71	.007	.009	.101	.102	.104	.106	.108	.110	.112	.114	.116	.118	71	
72	.009	.101	.103	.105	.107	.109	.111	.113	.115	.117	.119	.120	72	
73	.101	.103	.105	.107	.109	.111	.113	.115	.117	.119	.121	.123	73	
74	.104	.106	.108	.110	.112	.114	.116	.118	.120	.122	.124	.126	74	
75	.106	.108	.110	.112	.114	.116	.118	.120	.122	.125	.127	.129	75	
76	.108	.110	.112	.114	.117	.119	.121	.123	.125	.127	.129	.131	76	
77	.110	.112	.115	.117	.119	.121	.123	.126	.128	.130	.132	.134	77	
78	.113	.115	.117	.119	.122	.124	.126	.128	.130	.133	.135	.137	78	
79	.115	.117	.119	.122	.124	.126	.128	.131	.133	.135	.137	.140	79	
80	-.117	-.119	-.122	-.124	-.126	-.129	-.131	-.133	-.136	-.138	-.140	-.143	80	
81	.119	.122	.124	.126	.129	.131	.134	.136	.138	.141	.143	.145	81	
82	.122	.124	.126	.129	.131	.134	.136	.138	.141	.143	.146	.148	82	
83	.124	.126	.129	.131	.134	.136	.139	.141	.143	.146	.148	.151	83	
84	.126	.129	.131	.134	.136	.139	.141	.144	.146	.149	.151	.154	84	
85	.128	.131	.133	.136	.139	.141	.144	.146	.149	.151	.154	.156	85	
86	.131	.133	.136	.138	.141	.144	.146	.149	.151	.154	.156	.159	86	
87	.133	.136	.138	.141	.143	.146	.149	.151	.154	.157	.159	.162	87	
88	.135	.138	.141	.143	.146	.149	.151	.154	.157	.159	.162	.165	88	
89	.137	.140	.143	.145	.148	.151	.154	.156	.159	.162	.165	.167	89	
90	-.140	-.142	-.145	-.148	-.151	-.153	-.156	-.159	-.162	-.164	-.167	-.170	90	
91	.142	.145	.148	.150	.153	.156	.159	.162	.165	.167	.170	.173	91	
92	.144	.147	.150	.153	.156	.158	.161	.164	.167	.170	.172	.175	92	
93	.147	.149	.152	.155	.158	.161	.164	.167	.170	.172	.175	.178	93	
94	.149	.152	.155	.157	.161	.163	.166	.169	.172	.175	.177	.180	94	
95	.151	.154	.157	.160	.163	.166	.169	.172	.175	.178	.180	.183	95	
96	.153	.156	.159	.162	.165	.168	.171	.174	.177	.180	.183	.186	96	
97	.156	.159	.162	.165	.168	.171	.174	.177	.180	.183	.186	.189	97	
98	.158	.161	.164	.167	.170	.173	.176	.179	.183	.186	.188	.191	98	
99	.160	.163	.166	.169	.173	.176	.179	.182	.185	.188	.191	.194	99	
100	-.162	-.166	-.169	-.172	-.175	-.178	-.181	-.185	-.188	-.191	-.194	-.197	100	
101	.165	.168	.171	.174	.178	.181	.184	.187	.190	.194	.197	.200	101	
102	.167	.170	.173	.177	.180	.183	.186	.190	.193	.196	.200	.203	102	
103	.169	.172	.176	.179	.182	.186	.189	.192	.196	.199	.202	.206	103	
104	.171	.175	.178	.181	.185	.188	.192	.195	.198	.202	.205	.208	104	
105	.174	.177	.180	.184	.187	.191	.194	.197	.201	.204	.208	.211	105	
106	.176	.179	.183	.186	.190	.193	.197	.200	.203	.207	.210	.214	106	
107	.178	.182	.185	.189	.192	.196	.199	.203	.206	.210	.213	.217	107	
108	.180	.184	.187	.191	.195	.198	.202	.205	.209	.212	.216	.219	108	
109	.183	.186	.190	.193	.197	.201	.204	.208	.211	.215	.218	.222	109	
110	.185	.189	.192	.196	.199	.203	.207	.210	.214	.218	.221	.225	110	

This table has been extended so as to include ranges of temperature from -10° to 0° , and from 100° to 110° Fahrenheit and for inches below 20, by means of the formula (b being the reading of the barometer and t the temperature):—

$$\text{Reduction} = b \frac{0.0001001 (t-32) - 0.00001043 (t-32)}{1 + 0.0001001 (t-32)}$$

which is the formula used by Schumacher in the construction of the original table. See *Sammlung von Hauptsätzen*, p. 187, New Ed. Altona, 1845.

TABLE II,

For reducing Observations of the Barometer to sea-level, correction additive.

Barometer reading at sea-level, 30 inches.

Height in feet.	TEMPERATURE OF EXTERNAL AIR—DEGREES, FAHRENHEIT.													Diff. for 1 inch.
	−20°	−10°	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	100°	
10	−013	−013	−012	−012	−012	−012	−011	−011	−011	−011	−010	−010	−010	−000
20	−026	−025	−025	−024	−023	−023	−022	−022	−022	−021	−021	−020	−020	−001
30	−039	−038	−037	−036	−035	−034	−034	−033	−032	−032	−031	−030	−030	−001
40	−052	−050	−049	−048	−047	−046	−045	−044	−043	−042	−041	−040	−040	−001
50	−065	−063	−061	−060	−059	−058	−056	−055	−054	−053	−052	−051	−050	−002
60	−077	−076	−074	−072	−070	−069	−068	−066	−065	−063	−062	−061	−059	−002
70	−090	−088	−086	−084	−082	−081	−078	−077	−076	−074	−072	−071	−069	−003
80	−103	−101	−098	−096	−094	−092	−090	−088	−086	−084	−082	−081	−079	−003
90	−116	−113	−111	−108	−105	−104	−101	−099	−097	−095	−093	−091	−080	−003
100	−129	−126	−123	−120	−117	−115	−112	−110	−108	−105	−103	−101	−099	−001
110	−142	−139	−135	−132	−129	−126	−123	−121	−119	−116	−113	−111	−108	−001
120	−155	−151	−148	−144	−140	−138	−134	−132	−129	−126	−124	−121	−119	−001
130	−168	−164	−160	−156	−152	−149	−146	−143	−140	−137	−134	−131	−129	−005
140	−181	−176	−172	−168	−164	−161	−157	−154	−151	−147	−144	−141	−138	−005
150	−194	−189	−185	−180	−176	−172	−168	−165	−162	−158	−155	−152	−149	−006
160	−206	−201	−197	−192	−187	−183	−179	−176	−172	−168	−165	−162	−158	−000
170	−219	−214	−209	−204	−199	−195	−190	−187	−183	−179	−175	−172	−168	−006
180	−232	−227	−222	−216	−211	−206	−202	−198	−194	−190	−185	−182	−178	−007
190	−245	−239	−234	−228	−222	−218	−213	−209	−204	−200	−196	−192	−188	−007
200	−258	−252	−246	−240	−234	−229	−224	−220	−215	−210	−206	−202	−198	−007
210	−271	−264	−258	−252	−246	−240	−235	−231	−226	−221	−216	−212	−208	−008
220	−284	−277	−270	−264	−257	−252	−246	−242	−236	−231	−227	−222	−218	−008
230	−296	−289	−283	−276	−269	−263	−257	−253	−247	−242	−237	−232	−228	−008
240	−309	−302	−295	−288	−281	−275	−269	−264	−258	−252	−248	−242	−238	−009
250	−322	−314	−307	−300	−293	−286	−280	−275	−269	−263	−258	−253	−248	−009

TABLE II,

For reducing Observations of the Barometer to sea-level, correction additive—(contd.).

Barometer reading at sea-level, 30 inches.

Height in feet.	TEMPERATURE OF EXTERNAL AIR—DEGREES, FAHRENHEIT.													Diff. for 1 inch.
	—20°	—10°	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	100°	
260	·335	·327	·319	·311	·304	·297	·291	·285	·279	·273	·268	·263	·257	·009
270	·348	·339	·331	·323	·316	·309	·302	·296	·290	·284	·278	·273	·267	·010
280	·360	·352	·344	·335	·328	·320	·314	·307	·301	·294	·288	·283	·277	·010
290	·373	·364	·356	·347	·339	·332	·325	·318	·311	·305	·299	·293	·287	·010
300	·386	·377	·368	·359	·351	·343	·336	·329	·323	·315	·309	·303	·297	·011
310	·399	·389	·380	·371	·363	·354	·347	·340	·333	·326	·319	·313	·307	·011
320	·412	·402	·392	·383	·374	·366	·358	·351	·343	·336	·329	·323	·317	·012
330	·424	·414	·404	·395	·386	·377	·369	·362	·354	·347	·340	·333	·326	·012
340	·437	·427	·416	·407	·397	·389	·380	·373	·365	·357	·350	·343	·336	·012
350	·450	·439	·429	·419	·409	·400	·392	·384	·376	·368	·360	·353	·346	·013
360	·463	·451	·441	·430	·421	·411	·403	·394	·386	·378	·370	·363	·356	·013
370	·476	·464	·453	·442	·432	·423	·414	·405	·397	·389	·380	·373	·366	·013
380	·488	·476	·465	·454	·444	·434	·425	·416	·408	·399	·391	·383	·375	·014
390	·501	·489	·477	·466	·455	·446	·436	·427	·418	·410	·401	·393	·385	·014
400	·514	·501	·489	·478	·467	·457	·447	·438	·429	·420	·411	·403	·395	·014
410	·527	·513	·501	·490	·479	·468	·458	·449	·440	·430	·421	·413	·405	·015
420	·539	·526	·513	·502	·490	·480	·469	·460	·450	·441	·431	·423	·415	·015
430	·552	·538	·525	·513	·502	·491	·480	·470	·461	·451	·442	·433	·425	·015
440	·565	·551	·537	·525	·513	·502	·491	·481	·471	·462	·452	·443	·434	·016
450	·578	·563	·550	·537	·525	·513	·503	·492	·482	·472	·462	·453	·444	·016
460	·590	·575	·562	·549	·537	·525	·514	·503	·493	·482	·472	·463	·454	·017
470	·603	·588	·574	·561	·548	·536	·525	·514	·503	·493	·482	·473	·464	·017
480	·616	·600	·586	·572	·560	·547	·536	·524	·514	·503	·493	·483	·474	·018
490	·628	·613	·598	·584	·571	·559	·547	·535	·524	·513	·503	·493	·483	·018
500	·641	·625	·610	·596	·583	·570	·559	·546	·535	·524	·513	·503	·493	·018

TABLE III.

Table of the Elastic Force of Vapour in inches of mercury in the latitude of 22° at sea-level, reduced from the table computed by the Reverend Robert Dixon from Regnault's original data.

◦	Inch.	◦	Inch.	◦	Inch.	◦	Inch.	◦	Inch.	◦	Inch.	◦	Inch.	◦	Inch.
0'0	.0410	0'0	.0578	12'0	.0755	18'0	.0985	24'0	.1282	30'0	.1685	36'0	.2120	42'0	.2680
.2	.0444	.2	.0593	.2	.0762	.2	.0991	.2	.1203	.2	.1679	.2	.2141	.2	.2700
.4	.0448	.4	.0589	.4	.0769	.4	.1003	.4	.1301	.4	.1694	.4	.2160	.4	.2721
.6	.0452	.6	.0594	.6	.0776	.6	.1012	.6	.1316	.6	.1709	.6	.2177	.6	.2742
.8	.0456	.8	.0599	.8	.0783	.8	.1021	.8	.1327	.8	.1723	.8	.2194	.8	.2762
1'0	.0460	7'0	.0605	13'0	.0790	19'0	.1030	25'0	.1339	31'0	.1738	37'0	.2210	43'0	.2783
.2	.0465	.2	.0610	.2	.0797	.2	.1039	.2	.1351	.2	.1754	.2	.2227	.2	.2804
.4	.0469	.4	.0616	.4	.0804	.4	.1048	.4	.1363	.4	.1769	.4	.2244	.4	.2825
.6	.0473	.6	.0621	.6	.0811	.6	.1057	.6	.1374	.6	.1784	.6	.2262	.6	.2846
.8	.0477	.8	.0627	.8	.0818	.8	.1066	.8	.1386	.8	.1800	.8	.2280	.8	.2868
2'0	.0482	8'0	.0632	14'0	.0825	20'0	.1076	26'0	.1399	32'0	.1815	38'0	.2298	44'0	.2890
.2	.0486	.2	.0638	.2	.0833	.2	.1085	.2	.1411	.2	.1830	.2	.2316	.2	.2912
.4	.0491	.4	.0641	.4	.0840	.4	.1095	.4	.1423	.4	.1844	.4	.2334	.4	.2934
.6	.0495	.6	.0646	.6	.0848	.6	.1104	.6	.1435	.6	.1859	.6	.2352	.6	.2957
.8	.0500	.8	.0655	.8	.0855	.8	.1114	.8	.1448	.8	.1874	.8	.2370	.8	.2980
3'0	.0501	9'0	.0661	15'0	.0863	21'0	.1124	27'0	.1461	33'0	.1889	39'0	.2388	45'0	.3003
.2	.0509	.2	.0667	.2	.0870	.2	.1134	.2	.1473	.2	.1903	.2	.2406	.2	.3026
.4	.0513	.4	.0673	.4	.0878	.4	.1144	.4	.1486	.4	.1918	.4	.2425	.4	.3049
.6	.0518	.6	.0679	.6	.0886	.6	.1154	.6	.1499	.6	.1934	.6	.2444	.6	.3072
.8	.0523	.8	.0685	.8	.0894	.8	.1164	.8	.1512	.8	.1949	.8	.2463	.8	.3094
1'0	.0527	10'0	.0691	16'0	.0902	22'0	.1174	28'0	.1526	34'0	.1965	40'0	.2482	46'0	.3117
.2	.0532	.2	.0697	.2	.0910	.2	.1184	.2	.1539	.2	.1980	.2	.2501	.2	.3140
.4	.0537	.4	.0704	.4	.0919	.4	.1195	.4	.1552	.4	.1996	.4	.2520	.4	.3163
.6	.0542	.6	.0710	.6	.0927	.6	.1205	.6	.1566	.6	.2011	.6	.2539	.6	.3187
.8	.0547	.8	.0716	.8	.0935	.8	.1216	.8	.1579	.8	.2027	.8	.2559	.8	.3211
5'0	.0553	11'0	.0723	17'0	.0943	23'0	.1226	29'0	.1593	35'0	.2044	41'0	.2578	47'0	.3235
.2	.0558	.2	.0729	.2	.0951	.2	.1237	.2	.1608	.2	.2060	.2	.2598	.2	.3260
.4	.0563	.4	.0736	.4	.0960	.4	.1249	.4	.1622	.4	.2076	.4	.2619	.4	.3285
.6	.0568	.6	.0742	.6	.0968	.6	.1260	.6	.1636	.6	.2092	.6	.2639	.6	.3310
.8	.0573	.8	.0749	.8	.0977	.8	.1271	.8	.1650	.8	.2109	.8	.2659	.8	.3335

TABLE III.

Table of the Elastic Force of Vapour in inches of mercury in the latitude of 22° at sea-level, reduced from the table computed by the Reverend Robert Dixon from Regnault's original data—(continued).

°	Inch.														
48°	3359	51°	4187	60°	5193	66°	6406	72°	7803	78°	9604	84°	11676	90°	14128
2	3384	2	4217	2	5230	2	6451	2	7918	2	9867	2	11752	2	14218
4	3400	4	4249	4	5267	4	6405	4	7972	4	9731	4	11828	4	14307
6	3435	6	4280	6	5301	6	6540	6	9025	6	9795	6	11901	6	14397
8	3460	8	4311	8	5342	8	6586	8	9078	8	9860	8	11980	8	14488
49°	3486	55°	4341	61°	5379	67°	6631	73°	8132	79°	9926	85°	12057	91°	14579
2	3512	2	4372	2	5418	2	6676	2	8187	2	9992	2	12135	2	14670
4	3538	4	4403	4	5456	4	6722	4	8242	4	10058	4	12213	4	14762
6	3564	6	4435	6	5495	6	6769	6	8297	6	10124	6	12291	6	14854
8	3591	8	4467	8	5533	8	6816	8	8353	8	10190	8	12369	8	14947
50°	3617	56°	4501	62°	5572	68°	6863	74°	8410	80°	10256	86°	12449	92°	15041
2	3644	2	4534	2	5612	2	6909	2	8166	2	10323	2	12520	2	15135
4	3671	4	4567	4	5652	4	6956	4	8523	4	10391	4	12609	4	15229
6	3698	6	4600	6	5692	6	7004	6	8581	6	10459	6	12690	6	15324
8	3725	8	4633	8	5731	8	7052	8	8638	8	10527	8	12771	8	15419
51°	3753	57°	4666	63°	5771	69°	7101	75°	8096	81°	10596	87°	12852	93°	15515
2	3780	2	4700	2	5812	2	7150	2	8754	2	10664	2	12934	2	15612
4	3808	4	4733	4	5853	4	7199	4	8812	4	10733	4	13016	4	15709
6	3837	6	4767	6	5894	6	7249	6	8872	6	10803	6	13099	6	15806
8	3865	8	4801	8	5935	8	7298	8	8931	8	10874	8	13182	8	15904
52°	3893	58°	4836	64°	5976	70°	7348	76°	8990	82°	10916	88°	13266	94°	16003
2	3921	2	4870	2	6018	2	7398	2	9049	2	11018	2	13350	2	16102
4	3950	4	4905	4	6060	4	7448	4	9109	4	11090	4	13434	4	16202
6	3970	6	4941	6	6102	6	7499	6	9169	6	11162	6	13519	6	16303
8	4008	8	4976	8	6145	8	7550	8	9230	8	11234	8	13605	8	16403
53°	4037	59°	5011	65°	6188	71°	7602	77°	9292	83°	11306	89°	13691	95°	16504
2	4067	2	5047	2	6231	2	7651	2	9354	2	11379	2	13778	2	16606
4	4096	4	5083	4	6274	4	7706	4	9417	4	11453	4	13865	4	16709
6	4126	6	5119	6	6318	6	7759	6	9479	6	11527	6	13952	6	16812
8	4156	8	5156	8	6362	8	7811	8	9542	8	11601	8	14040	8	16915

TABLE IV,

For finding the Tension of Vapour in the Air, in English inches, from the readings of the dry t and wet bulb t' thermometers, at the mean barometric pressure of 29.7 inches and in the latitude of 22°.

Wet bulb t' .	VALUES OF $t-t'$ IN DEGREES, FAHRENHEIT.													
	0	0.5	1	1.5	2	2.5	3	3.5	4	4.5	5	5.5	6	6.5
0	.044	.038	.033	.027	.021	.015	.010	.004						
1	.046	.040	.035	.029	.023	.017	.012	.006						
2	.048	.042	.037	.031	.025	.019	.014	.009	.002					
3	.050	.045	.039	.033	.027	.022	.016	.010	.004					
4	.053	.047	.041	.035	.030	.024	.018	.012	.007	.001				
5	.055	.050	.044	.038	.032	.026	.021	.015	.009	.003				
6	.058	.052	.046	.041	.035	.029	.023	.017	.012	.006				
7	.061	.055	.049	.043	.037	.032	.026	.020	.014	.009	.003			
8	.063	.057	.052	.046	.040	.034	.029	.023	.017	.011	.005			
9	.066	.060	.055	.049	.043	.037	.031	.026	.020	.014	.008	.002		
10	.069	.063	.058	.052	.046	.040	.034	.029	.023	.017	.011	.005		
11	.072	.067	.061	.055	.049	.043	.038	.032	.026	.020	.014	.009	.003	
12	.076	.070	.064	.058	.052	.047	.041	.035	.029	.023	.018	.012	.006	
13	.079	.073	.067	.062	.056	.050	.044	.038	.033	.027	.021	.015	.009	.004
14	.083	.077	.071	.065	.059	.053	.048	.042	.036	.030	.024	.019	.013	.007
15	.086	.081	.075	.069	.063	.057	.051	.046	.040	.034	.028	.022	.017	.011
16	.090	.084	.079	.073	.067	.061	.055	.049	.044	.038	.032	.026	.020	.015
17	.094	.089	.083	.077	.071	.065	.059	.054	.048	.042	.036	.030	.024	.019
18	.099	.093	.087	.081	.075	.069	.064	.058	.052	.046	.040	.034	.029	.023
19	.103	.097	.091	.086	.080	.074	.068	.062	.056	.051	.045	.039	.032	.027
20	.108	.102	.096	.090	.084	.078	.073	.067	.061	.055	.049	.043	.038	.032
21	.112	.107	.101	.095	.089	.083	.077	.072	.066	.060	.054	.048	.042	.036
22	.117	.112	.106	.100	.094	.088	.082	.076	.071	.065	.059	.053	.047	.041
23	.123	.117	.111	.105	.099	.093	.088	.082	.076	.070	.064	.058	.052	.047
24	.128	.122	.117	.111	.105	.099	.093	.087	.081	.076	.070	.064	.058	.052
25	.134	.128	.122	.116	.110	.105	.099	.093	.087	.081	.075	.069	.064	.059
26	.140	.134	.128	.122	.116	.111	.105	.099	.093	.087	.081	.075	.070	.064
27	.146	.140	.134	.129	.123	.117	.111	.105	.099	.093	.087	.082	.076	.070
28	.153	.147	.141	.135	.129	.123	.117	.111	.106	.100	.094	.088	.082	.076
29	.159	.153	.148	.142	.136	.130	.124	.118	.112	.106	.100	.095	.089	.083

TABLE IV,

For finding the Tension of Vapour in the Air, in English inches, from the readings of the dry t and wet bulb t' thermometers, at the mean barometric pressure of 29.7 inches and in the latitude of 22°—(continued).

Wet bulb t' .	VALUES OF $t-t'$ IN DEGREES, FAHRENHEIT.													
	7	7.5	8	8.5	9	9.5	10	10.5	11	11.5	12	12.5	13	13.5
0														
1														
2														
3														
4														
5														
6														
7														
8														
9														
10														
11														
12														
13														
14	.001													
15	.005													
16	.009	.003												
17	.013	.007	.001											
18	.017	.011	.005											
19	.021	.015	.010	.004										
20	.026	.020	.014	.008	.003									
21	.031	.025	.019	.013	.007	.001								
22	.036	.030	.024	.018	.012	.000								
23	.041	.035	.029	.023	.017	.011	.006							
24	.046	.040	.034	.029	.023	.017	.011	.005						
25	.052	.046	.040	.034	.028	.023	.017	.011	.005					
26	.058	.052	.046	.040	.034	.028	.023	.017	.011	.005				
27	.064	.058	.052	.046	.040	.035	.029	.023	.017	.011	.005			
28	.070	.064	.059	.053	.047	.041	.035	.029	.023	.017	.012	.006		
29	.077	.071	.065	.059	.053	.048	.042	.036	.030	.024	.018	.012	.006	

TABLE IV,

For finding the Tension of Vapour in the Air, in English inches, from the readings of the dry t and wet bulb t' thermometers, at the mean barometric pressure of 29.7 inches in the latitude of 22°—(continued).

Wet bulb t'	VALUES OF $t-t'$ IN DEGREES, FAHRENHEIT.																	
	0	0.5	1	1.5	2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5
30	167	161	155	149	143	137	131	125	119	114	108	102	96	90	84	78	72	66
31	174	168	162	156	150	144	138	133	127	121	115	109	103	97	91	85	80	74
32	182	175	169	162	156	149	143	136	130	123	117	110	104	97	91	84	78	71
33	189	182	176	169	163	156	150	143	137	130	124	117	111	104	98	91	85	78
34	197	190	184	177	171	164	158	151	145	138	132	125	119	112	105	99	92	86
35	204	198	191	185	178	172	165	159	152	146	139	133	126	120	113	107	100	94
36	213	206	200	193	187	180	174	167	161	154	147	141	134	128	121	115	108	102
37	221	215	208	201	195	188	182	175	169	162	156	149	143	136	130	123	117	110
38	230	223	217	210	204	197	191	184	178	171	165	158	152	145	138	132	125	119
39	239	232	226	219	213	206	200	193	187	180	174	167	160	154	147	141	134	128
40	248	242	235	229	222	216	209	202	196	189	183	176	170	163	157	150	144	137
41	258	251	245	238	232	225	219	212	205	199	192	186	179	173	166	160	153	147
42	268	261	255	248	242	235	229	222	216	209	203	196	189	183	176	170	163	157
43	278	272	265	259	252	246	239	232	226	219	213	206	200	193	187	180	173	167
44	289	282	276	269	263	256	250	243	237	230	223	217	210	204	197	191	184	177
45	299	287	281	274	268	261	254	248	241	235	228	222	215	208	202	195	189	
46	312	305	299	292	285	279	272	266	259	253	246	239	233	226	220	213	207	200
47	324	317	310	304	297	291	284	277	271	264	258	251	245	238	231	225	218	212
48	336	329	323	316	310	303	296	290	283	277	270	263	257	250	244	237	231	224
49	349	342	335	329	322	316	309	302	296	289	283	276	270	263	256	250	243	237
50	362	355	349	342	335	329	322	316	309	302	296	289	283	276	269	263	256	250
51	375	369	362	356	349	342	336	329	323	316	309	303	296	289	283	276	270	263
52	389	383	376	370	363	356	350	343	336	330	323	317	310	303	297	290	284	277
53	404	397	391	384	377	371	364	357	351	344	338	331	324	318	311	304	298	291
54	419	412	406	399	392	386	379	372	366	359	353	346	339	333	326	319	313	306
55	434	428	421	414	408	401	394	388	381	374	368	361	355	348	341	336	328	321
56	450	444	437	430	424	417	410	404	397	390	384	377	371	364	357	351	344	337
57	467	460	453	447	440	433	427	420	414	407	400	394	387	380	374	367	360	354
58	484	477	470	464	457	450	444	437	430	424	417	411	404	397	391	384	377	371
59	501	494	488	481	475	468	461	455	448	441	435	428	421	415	408	401	395	388

TABLE IV,

For finding the Tension of Vapour in the Air, in English inches, from the readings of the dry t and wet bulb t' thermometers, at the mean barometric pressure of 29.7 inches and in the latitude of 22°—(continued).

Wet bulb t'	VALUES OF $t-t'$ IN DEGREES, FAHRENHEIT.																		
	9	9.5	10	10.5	11	11.5	12	12.5	13	13.5	14	14.5	15	15.5	16	16.5	17	17.5	
30	.001	.055	.049	.043	.037	.031	.025	.019	.013	.008	.002								
31	.068	.062	.056	.050	.044	.038	.032	.026	.021	.015	.009	.003							
32	.065	.068	.052	.045	.039	.032	.026	.019	.013	.006									
33	.072	.065	.059	.052	.046	.039	.033	.026	.020	.013	.007								
34	.079	.073	.066	.060	.053	.047	.040	.031	.027	.021	.014	.008	.001						
35	.087	.081	.074	.068	.061	.055	.048	.042	.035	.029	.022	.016	.009	.003					
36	.095	.089	.082	.076	.069	.063	.056	.050	.043	.037	.030	.024	.017	.011	.004				
37	.104	.097	.091	.084	.078	.071	.065	.058	.051	.045	.038	.032	.025	.019	.012	.006			
38	.112	.104	.099	.093	.086	.080	.073	.067	.061	.054	.047	.041	.034	.027	.021	.014	.008	.001	
39	.121	.115	.108	.102	.095	.089	.082	.076	.069	.062	.056	.049	.043	.036	.030	.023	.017	.010	
40	.131	.124	.117	.111	.104	.098	.092	.085	.078	.072	.065	.059	.052	.046	.039	.032	.026	.019	
41	.140	.133	.127	.120	.114	.107	.101	.094	.088	.081	.075	.068	.061	.055	.048	.042	.035	.029	
42	.150	.144	.137	.130	.124	.117	.111	.104	.098	.091	.085	.078	.072	.065	.058	.052	.045	.039	
43	.160	.154	.147	.141	.134	.128	.121	.114	.108	.101	.095	.088	.082	.075	.069	.062	.055	.049	
44	.171	.164	.158	.151	.145	.138	.132	.125	.118	.112	.105	.099	.092	.086	.079	.072	.066	.059	
45	.182	.176	.169	.162	.156	.149	.143	.136	.130	.123	.116	.110	.103	.097	.090	.084	.077	.070	
46	.193	.187	.180	.174	.167	.161	.154	.147	.141	.134	.128	.121	.114	.108	.101	.095	.089	.082	
47	.205	.198	.192	.185	.179	.172	.166	.160	.152	.146	.139	.133	.126	.120	.113	.106	.100	.093	
48	.217	.211	.204	.198	.191	.184	.178	.171	.165	.158	.151	.145	.138	.132	.125	.119	.112	.105	
49	.230	.223	.217	.210	.204	.197	.190	.184	.177	.171	.164	.157	.151	.144	.138	.131	.124	.118	
50	.243	.236	.230	.223	.217	.210	.203	.197	.190	.184	.177	.170	.164	.157	.151	.144	.137	.131	
51	.256	.250	.243	.237	.230	.223	.217	.210	.204	.197	.190	.184	.177	.171	.164	.157	.151	.144	
52	.270	.264	.257	.250	.244	.237	.231	.224	.217	.211	.204	.198	.191	.184	.178	.171	.165	.159	
53	.285	.278	.271	.264	.258	.252	.245	.238	.232	.225	.218	.212	.205	.199	.192	.185	.179	.172	
54	.300	.293	.286	.280	.273	.266	.260	.253	.247	.240	.233	.227	.220	.213	.207	.200	.194	.187	
55	.315	.308	.302	.295	.288	.282	.275	.268	.262	.255	.248	.242	.235	.229	.222	.215	.209	.202	
56	.331	.324	.317	.311	.304	.298	.291	.284	.278	.271	.264	.258	.261	.244	.238	.231	.224	.218	
57	.347	.340	.334	.327	.321	.314	.307	.301	.294	.287	.281	.274	.267	.261	.254	.247	.241	.234	
58	.364	.357	.351	.344	.337	.331	.324	.317	.311	.304	.297	.291	.284	.278	.271	.264	.258	.251	
59	.381	.375	.368	.361	.355	.348	.341	.335	.328	.321	.315	.308	.301	.295	.288	.282	.275	.268	

TABLE IV,

For finding the Tension of Vapour in the Air, in English inches, from the readings of the dry t and wet bulb t' thermometers, at the mean barometric pressure of 29.7 inches and in the latitude of 22°—(continued).

Wet bulb t' .	VALUES OF $t - t'$ IN DEGREES, FAHRENHEIT.																	
	18	18.5	19	19.5	20	20.5	21	21.5	22	22.5	23	23.5	24	24.5	25	25.5	26	26.5
30																		
31																		
32																		
33																		
34																		
35																		
36																		
37																		
38																		
39	.004																	
40	.013	.006																
41	.022	.016	.009	.003														
42	.032	.026	.019	.013	.006													
43	.012	.036	.029	.023	.016	.009	.003											
44	.053	.016	.010	.003	.027	.020	.013	.007										
45	.064	.057	.051	.044	.038	.031	.024	.018	.011	.005								
46	.075	.068	.062	.055	.049	.042	.036	.029	.022	.016	.009	.003						
47	.087	.080	.073	.067	.060	.054	.047	.041	.034	.027	.021	.014	.008					
48	.099	.092	.086	.079	.072	.066	.059	.053	.046	.039	.033	.026	.020	.013	.007			
49	.111	.105	.098	.091	.085	.078	.072	.065	.059	.052	.045	.039	.032	.026	.019	.012	.006	
50	.124	.118	.111	.104	.098	.091	.085	.078	.071	.065	.058	.052	.045	.038	.032	.025	.019	.012
51	.138	.131	.124	.118	.111	.104	.098	.091	.085	.078	.071	.065	.058	.052	.045	.038	.032	.025
52	.151	.145	.138	.131	.125	.118	.112	.105	.098	.092	.085	.079	.072	.065	.059	.052	.046	.039
53	.165	.159	.152	.146	.139	.132	.126	.119	.113	.106	.099	.093	.086	.079	.073	.066	.060	.053
54	.180	.174	.167	.160	.154	.147	.141	.134	.127	.121	.114	.107	.101	.094	.088	.081	.074	.068
55	.195	.180	.182	.176	.169	.162	.156	.149	.142	.136	.129	.123	.116	.109	.103	.096	.089	.083
56	.211	.205	.198	.191	.185	.178	.171	.165	.158	.151	.145	.138	.132	.125	.118	.112	.105	.098
57	.228	.221	.214	.208	.201	.194	.188	.181	.174	.168	.161	.154	.148	.141	.135	.128	.121	.115
58	.244	.238	.231	.224	.218	.211	.204	.198	.191	.184	.178	.171	.164	.158	.151	.145	.138	.131
59	.262	.255	.248	.242	.235	.228	.222	.215	.208	.202	.195	.188	.182	.175	.168	.162	.156	.148

TABLE IV,

For finding the Tension of Vapour in the Air, in English inches, from the readings of the dry t and wet bulb t' thermometers, at the mean barometric pressure of 29.7 inches and in the latitude of 22°—(continued).

Wet bulb t' .	VALUES OF $t - t'$ IN DEGREES, FAHRENHEIT.																	
	0	0.5	1	1.5	2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5
60	.519	.513	.506	.499	.493	.486	.479	.473	.466	.459	.453	.446	.439	.433	.426	.419	.413	.406
61	.538	.531	.525	.518	.511	.505	.498	.491	.485	.478	.471	.465	.458	.451	.445	.438	.431	.425
62	.557	.551	.544	.537	.531	.524	.517	.511	.504	.497	.491	.484	.477	.470	.464	.457	.450	.444
63	.577	.570	.564	.557	.550	.544	.537	.530	.524	.517	.510	.504	.497	.490	.484	.477	.470	.464
64	.598	.591	.584	.578	.571	.564	.558	.551	.544	.537	.531	.524	.517	.511	.504	.497	.491	.484
65	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
66	.619	.612	.605	.599	.592	.585	.579	.572	.565	.559	.552	.545	.539	.532	.525	.518	.512	.505
67	.641	.634	.627	.621	.614	.607	.600	.594	.587	.580	.574	.567	.560	.554	.547	.540	.533	.527
68	.663	.656	.650	.643	.636	.630	.623	.616	.610	.603	.596	.589	.583	.576	.569	.563	.556	.549
69	.686	.680	.673	.666	.660	.653	.646	.639	.633	.626	.619	.613	.606	.599	.592	.586	.579	.572
70	.710	.703	.697	.690	.683	.677	.670	.663	.656	.650	.643	.636	.630	.623	.616	.609	.603	.596
71	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
72	.735	.728	.721	.715	.708	.701	.695	.688	.681	.674	.668	.661	.654	.647	.641	.634	.627	.621
73	.760	.754	.747	.740	.733	.727	.720	.713	.706	.700	.693	.686	.679	.673	.666	.659	.653	.646
74	.786	.780	.773	.766	.759	.753	.746	.739	.732	.726	.719	.712	.706	.699	.692	.685	.679	.672
75	.813	.807	.800	.793	.786	.780	.773	.766	.759	.752	.745	.738	.732	.726	.719	.712	.705	.699
76	.841	.834	.828	.821	.814	.807	.801	.794	.787	.780	.771	.767	.760	.753	.747	.740	.733	.726
77	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
78	.870	.863	.856	.849	.843	.836	.829	.822	.816	.809	.802	.795	.789	.782	.775	.768	.762	.755
79	.899	.893	.886	.879	.872	.865	.858	.852	.845	.838	.831	.825	.818	.811	.804	.798	.791	.784
80	.929	.923	.916	.909	.902	.895	.889	.882	.875	.868	.862	.855	.848	.841	.834	.828	.821	.814
81	.960	.954	.947	.940	.933	.927	.920	.913	.906	.899	.893	.886	.879	.872	.866	.860	.853	.845
82	.993	.986	.979	.972	.966	.959	.952	.945	.938	.932	.925	.918	.911	.904	.898	.891	.884	.877
83	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
84	1.026	1.019	1.012	1.005	.998	.992	.985	.978	.971	.965	.958	.951	.944	.937	.931	.924	.917	.910
85	1.060	1.053	1.046	1.039	1.032	1.026	1.019	1.012	1.005	.998	.992	.985	.978	.971	.965	.958	.951	.944
86	1.095	1.088	1.081	1.074	1.067	1.061	1.054	1.047	1.040	1.033	1.027	1.020	1.013	1.006	.999	.993	.986	.979
87	1.131	1.124	1.117	1.110	1.103	1.097	1.090	1.083	1.076	1.069	1.063	1.056	1.049	1.042	1.035	1.029	1.022	1.015
88	1.168	1.161	1.154	1.147	1.140	1.134	1.127	1.120	1.113	1.106	1.100	1.093	1.086	1.079	1.072	1.065	1.059	1.052
89	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
90	1.206	1.199	1.192	1.185	1.179	1.172	1.165	1.158	1.151	1.144	1.138	1.131	1.124	1.117	1.110	1.103	1.097	1.090
91	1.245	1.238	1.231	1.224	1.218	1.211	1.204	1.197	1.190	1.183	1.177	1.170	1.163	1.156	1.149	1.142	1.136	1.129
92	1.285	1.278	1.272	1.265	1.258	1.251	1.244	1.237	1.231	1.224	1.217	1.210	1.203	1.196	1.190	1.183	1.176	1.169
93	1.327	1.320	1.313	1.306	1.299	1.292	1.286	1.279	1.272	1.265	1.258	1.251	1.245	1.238	1.231	1.224	1.217	1.210
94	1.360	1.362	1.355	1.349	1.342	1.335	1.328	1.321	1.314	1.308	1.301	1.294	1.287	1.280	1.273	1.266	1.260	1.253

TABLE IV,

For finding the Tension of Vapour in the Air, in English inches, from the readings of the dry t and wet bulb t' thermometers, at the mean barometric pressure of 39.7 inches and in the latitude of 22°--(continued).

Wet bulb t' .	VALUES OF $t-t'$ IN DEGREES, FAHRENHEIT.																	
	9	9.5	10	10.5	11	11.5	12	12.5	13	13.5	14	14.5	15	15.5	16	16.5	17	17.5
60	.300	.303	.308	.309	.373	.366	.359	.353	.346	.339	.333	.326	.319	.313	.306	.300	.293	.286
61	.418	.411	.405	.398	.391	.385	.378	.371	.365	.358	.351	.345	.338	.331	.325	.318	.311	.305
62	.437	.430	.424	.417	.410	.404	.397	.390	.384	.377	.370	.364	.357	.350	.344	.337	.330	.324
63	.457	.450	.444	.437	.430	.424	.417	.410	.403	.397	.390	.383	.377	.370	.363	.357	.350	.343
64	.477	.471	.464	.457	.451	.444	.437	.430	.424	.417	.410	.404	.397	.390	.384	.377	.370	.364
65	.498	.492	.485	.478	.472	.465	.458	.462	.445	.438	.431	.425	.418	.411	.405	.398	.391	.385
66	.520	.513	.507	.500	.493	.487	.480	.473	.466	.460	.453	.446	.440	.433	.426	.420	.413	.406
67	.542	.536	.529	.522	.516	.509	.502	.496	.489	.482	.475	.469	.462	.455	.449	.442	.435	.428
68	.566	.559	.552	.545	.539	.532	.525	.519	.512	.505	.498	.492	.485	.478	.472	.465	.458	.451
69	.580	.583	.576	.569	.562	.556	.549	.542	.535	.529	.522	.515	.509	.502	.495	.488	.492	.475
70	.614	.607	.600	.594	.587	.580	.573	.567	.560	.553	.547	.540	.533	.526	.520	.513	.506	.499
71	.639	.632	.626	.619	.612	.605	.599	.592	.585	.579	.572	.565	.558	.552	.545	.538	.531	.525
72	.665	.658	.652	.645	.638	.631	.625	.618	.611	.604	.598	.591	.584	.577	.571	.564	.557	.551
73	.692	.685	.678	.672	.665	.658	.651	.645	.638	.631	.624	.618	.611	.604	.597	.591	.584	.577
74	.720	.713	.706	.699	.693	.686	.679	.672	.666	.659	.652	.645	.639	.632	.625	.618	.612	.605
75	.748	.741	.735	.728	.721	.714	.707	.701	.694	.687	.680	.674	.667	.660	.653	.647	.640	.633
76	.777	.771	.764	.757	.750	.744	.737	.730	.723	.716	.710	.703	.696	.689	.683	.676	.669	.662
77	.807	.801	.794	.787	.780	.774	.767	.760	.753	.746	.740	.733	.726	.719	.713	.706	.699	.692
78	.838	.832	.825	.818	.811	.805	.798	.791	.784	.778	.771	.764	.757	.750	.744	.737	.730	.723
79	.871	.864	.857	.850	.843	.837	.830	.823	.816	.810	.803	.796	.789	.782	.776	.769	.763	.755
80	.903	.897	.890	.883	.876	.870	.863	.856	.849	.842	.836	.829	.822	.815	.808	.802	.795	.788
81	.937	.931	.924	.917	.910	.903	.897	.890	.883	.876	.869	.863	.856	.849	.842	.835	.829	.822
82	.972	.965	.959	.952	.945	.938	.931	.925	.918	.911	.904	.897	.891	.884	.877	.870	.863	.857
83	1.008	1.001	.994	.988	.981	.974	.967	.960	.954	.947	.940	.933	.926	.920	.913	.906	.899	.892
84	1.045	1.038	1.031	1.025	1.018	1.011	1.004	.997	.991	.984	.977	.970	.963	.956	.950	.943	.936	.929
85	1.083	1.076	1.069	1.063	1.056	1.049	1.042	1.035	1.028	1.022	1.015	1.008	1.001	.994	.988	.981	.974	.967
86	1.122	1.115	1.108	1.102	1.095	1.088	1.081	1.074	1.067	1.061	1.054	1.047	1.040	1.033	1.026	1.020	1.013	1.006
87	1.162	1.155	1.149	1.142	1.135	1.128	1.121	1.114	1.108	1.101	1.094	1.087	1.080	1.073	1.067	1.060	1.053	1.046
88	1.203	1.197	1.190	1.183	1.176	1.169	1.163	1.156	1.149	1.142	1.135	1.128	1.121	1.115	1.108	1.101	1.094	1.087
89	1.246	1.239	1.232	1.225	1.219	1.212	1.205	1.198	1.191	1.184	1.177	1.171	1.164	1.157	1.150	1.143	1.136	1.129

TABLE IV,

For finding the Tension of Vapour in the Air, in English inches, from the readings of the dry t and wet bulb t' thermometers, at the mean barometric pressure of 29.7 inches and in the latitude of 22°—(continued).

Wet bulb t' .	VALUES OF $t-t'$ IN DEGREES FAHRENHEIT.																		
	18	18.5	19	19.5	20	20.5	21	21.5	22	22.5	23	23.5	24	24.5	25	25.5	26	26.5	
60	280	273	266	260	253	246	240	233	226	220	213	206	200	193	186	180	173	166	
61	298	291	285	278	271	265	258	251	245	238	231	225	218	211	205	198	191	185	
62	317	310	304	297	290	284	277	270	264	257	250	244	237	230	224	217	210	204	
63	337	330	323	317	310	303	297	290	283	277	270	263	256	250	243	236	230	223	
64	357	350	344	337	330	323	317	310	303	297	290	283	277	270	263	257	250	243	
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
65	378	371	365	358	351	344	338	331	324	318	311	304	298	291	284	278	271	264	
66	399	393	386	379	373	366	359	353	346	339	332	326	319	312	306	299	292	286	
67	422	415	408	412	405	398	392	375	368	361	355	348	341	335	328	321	314	308	
68	445	438	431	425	418	411	404	398	391	384	378	371	364	357	351	344	337	331	
69	468	462	455	448	441	435	428	421	415	408	401	394	388	381	374	368	361	354	
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
70	493	486	479	473	466	459	452	446	439	432	426	419	412	405	399	392	385	378	
71	518	511	504	498	491	484	478	471	464	457	451	444	437	430	424	417	410	404	
72	544	537	530	524	517	510	503	497	490	483	476	470	463	456	449	443	436	427	
73	570	564	557	550	544	537	530	523	517	510	503	496	490	483	476	469	463	456	
74	598	591	585	578	571	564	558	551	544	537	531	524	517	510	504	497	490	483	
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
75	626	620	613	606	599	593	586	579	572	566	559	552	545	539	532	525	518	512	
76	656	649	642	635	629	622	615	608	601	595	588	581	574	568	561	554	547	541	
77	686	679	672	665	658	652	645	638	631	625	618	611	604	598	591	584	577	570	
78	717	710	703	696	689	683	676	669	662	656	649	642	635	628	622	615	608	601	
79	748	742	735	728	721	715	708	701	694	687	681	674	667	660	654	647	640	633	
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
80	781	774	768	761	754	747	741	734	727	720	713	707	700	693	686	679	673	666	
81	815	808	801	795	788	781	774	767	761	754	747	740	733	727	720	713	706	700	
82	850	843	836	829	823	816	809	802	795	789	782	775	768	761	755	748	741	734	
83	886	879	872	865	858	852	845	838	831	824	817	811	804	797	790	783	777	770	
84	922	916	909	902	895	888	881	875	868	861	854	847	841	834	827	820	813	807	
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
85	960	953	947	940	933	926	919	912	906	899	892	885	878	872	865	858	851	844	
86	999	992	985	979	972	965	958	951	944	938	931	924	917	910	904	907	900	893	
87	1'039	1'032	1'026	1'019	1'012	1'005	998	991	985	978	971	964	957	950	944	937	930	923	
88	1'080	1'074	1'067	1'060	1'053	1'046	1'039	1'032	1'026	1'019	1'012	1'005	998	991	985	978	971	964	
89	1'123	1'116	1'109	1'102	1'095	1'088	1'081	1'075	1'068	1'061	1'054	1'047	1'040	1'034	1'027	1'020	1'013	1'006	

TABLE IV,

For finding the Tension of Vapour in the Air, in English inches, from the readings of the dry t and wet bulb t' thermometers, at the mean barometric pressure of 29.7 inches and in the latitude of 22°—(continued).

Wet bulb t' .	VALUES OF $t-t'$ IN DEGREES, FAHRENHEIT.																	
	27	27.5	28	28.5	29	29.5	30	30.5	31	31.5	32	32.5	33	33.5	34	34.5	35	35.5
55	.078	.069	.063	.058	.050	.043	.036	.030	.023	.016	.010	.003						
56	.092	.085	.078	.072	.065	.059	.052	.045	.039	.032	.025	.019	.012	.005				
57	.103	.101	.095	.088	.081	.075	.068	.061	.055	.048	.041	.035	.029	.022	.015	.008		
58	.125	.118	.111	.105	.098	.091	.085	.078	.071	.065	.058	.051	.045	.038	.032	.025	.018	.012
59	.142	.135	.128	.122	.115	.108	.102	.095	.089	.082	.075	.069	.062	.055	.049	.042	.035	.029
60	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
61	.160	.153	.146	.140	.133	.126	.120	.113	.106	.100	.093	.086	.080	.073	.066	.060	.053	.046
62	.178	.171	.165	.158	.151	.145	.138	.131	.125	.118	.111	.105	.098	.091	.085	.078	.071	.065
63	.197	.190	.183	.177	.170	.163	.157	.150	.143	.137	.130	.123	.117	.110	.103	.097	.090	.083
64	.216	.210	.203	.196	.190	.183	.176	.170	.163	.156	.150	.143	.136	.130	.123	.116	.110	.103
65	.237	.230	.223	.217	.210	.203	.196	.190	.183	.176	.170	.163	.156	.150	.143	.136	.130	.123
66	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
67	.257	.251	.244	.237	.231	.224	.217	.211	.204	.197	.191	.184	.177	.170	.164	.157	.150	.144
68	.279	.272	.265	.259	.252	.245	.239	.232	.225	.219	.212	.205	.198	.192	.185	.178	.172	.165
69	.301	.294	.288	.281	.274	.268	.261	.254	.247	.241	.234	.227	.221	.214	.207	.200	.194	.187
70	.324	.317	.310	.304	.297	.290	.284	.277	.270	.264	.257	.250	.243	.237	.230	.223	.217	.210
71	.347	.341	.334	.327	.320	.314	.307	.300	.294	.287	.280	.273	.267	.260	.253	.247	.240	.233
72	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
73	.372	.365	.358	.352	.345	.338	.331	.325	.318	.311	.304	.298	.291	.284	.278	.271	.264	.257
74	.397	.390	.383	.377	.370	.363	.356	.350	.343	.336	.329	.323	.316	.309	.303	.296	.289	.282
75	.423	.416	.409	.402	.396	.389	.382	.376	.369	.362	.355	.348	.342	.335	.328	.321	.315	.308
76	.449	.442	.436	.429	.422	.415	.409	.402	.395	.388	.382	.375	.368	.361	.355	.348	.341	.334
77	.477	.470	.463	.456	.450	.443	.436	.429	.423	.416	.409	.402	.396	.389	.382	.375	.369	.362
78	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
79	.505	.498	.491	.485	.478	.471	.464	.457	.451	.444	.437	.430	.424	.417	.410	.403	.397	.390
80	.531	.527	.520	.514	.507	.500	.493	.487	.480	.473	.466	.459	.453	.446	.439	.432	.426	.419
81	.561	.557	.550	.543	.537	.530	.523	.516	.510	.503	.496	.489	.482	.476	.469	.462	.455	.449
82	.593	.588	.581	.574	.567	.561	.554	.547	.540	.534	.527	.520	.513	.506	.500	.493	.486	.479
83	.626	.620	.613	.606	.599	.593	.586	.579	.572	.565	.559	.552	.545	.538	.531	.525	.518	.511
84	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
85	.657	.651	.645	.639	.633	.627	.621	.615	.609	.603	.598	.591	.584	.578	.571	.564	.557	.550
86	.693	.686	.679	.672	.666	.659	.652	.645	.638	.632	.625	.618	.611	.604	.598	.591	.584	.577
87	.727	.721	.714	.707	.700	.693	.687	.680	.673	.666	.659	.653	.646	.639	.632	.625	.619	.612
88	.763	.756	.749	.743	.736	.729	.722	.715	.709	.702	.695	.688	.681	.675	.668	.661	.654	.647
89	.800	.793	.786	.779	.772	.766	.759	.752	.745	.738	.732	.725	.718	.711	.704	.697	.691	.684
90	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
91	.837	.831	.824	.817	.810	.803	.797	.790	.783	.776	.769	.762	.756	.749	.742	.735	.728	.721

TABLE IV,

For finding the Tension of Vapour in the Air, in English inches, from the readings of the dry t and wet bulb t' thermometers, at the mean barometric pressure of 29.7 inches and in the latitude of 22°—(concluded).

Wet bulb t' .	VALUES OF $t-t'$ IN DEGREES, FAHRENHEIT.													
	36	36.5	37	37.5	38	38.5	39	39.5	40	40.5	41	41.5	42	42.5
55														
56														
57														
58	.005													
59	.022	.015	.009	.002	.									
60	.010	.033	.026	.020	.013	.006								
61	.058	.051	.045	.038	.031	.025	.018	.011	.005					
62	.077	.070	.063	.057	.050	.043	.037	.030	.023	.017	.010	.003		
63	.096	.089	.083	.076	.069	.063	.056	.049	.043	.036	.029	.023	.016	.009
64	.116	.110	.103	.096	.089	.083	.070	.069	.063	.056	.049	.043	.036	.029
65	.137	.130	.124	.117	.110	.103	.097	.090	.083	.077	.070	.063	.057	.050
66	.158	.152	.145	.138	.132	.125	.118	.111	.105	.098	.091	.085	.078	.071
67	.180	.174	.167	.160	.154	.147	.140	.133	.127	.120	.113	.107	.100	.093
68	.193	.196	.190	.183	.176	.170	.163	.156	.149	.143	.136	.129	.122	.116
69	.226	.220	.213	.206	.200	.193	.186	.179	.173	.166	.159	.153	.146	.139
70	.251	.244	.237	.231	.224	.217	.210	.204	.197	.190	.183	.177	.170	.163
71	.276	.269	.262	.255	.249	.242	.235	.229	.222	.215	.208	.202	.195	.188
72	.301	.295	.288	.281	.274	.268	.261	.254	.247	.241	.234	.227	.220	.214
73	.328	.321	.314	.307	.301	.294	.287	.281	.274	.267	.260	.254	.247	.240
74	.355	.348	.342	.335	.328	.321	.315	.308	.301	.294	.288	.281	.274	.267
75	.383	.376	.370	.363	.356	.349	.343	.336	.329	.322	.316	.309	.302	.295
76	.412	.405	.399	.392	.385	.378	.372	.365	.358	.351	.344	.338	.331	.324
77	.442	.435	.428	.422	.415	.408	.401	.394	.388	.381	.374	.367	.361	.354
78	.473	.466	.459	.452	.445	.439	.432	.425	.418	.412	.405	.398	.391	.384
79	.504	.498	.491	.484	.477	.470	.464	.457	.450	.443	.437	.430	.423	.416
80	.537	.530	.523	.517	.510	.503	.496	.489	.483	.476	.469	.462	.455	.449
81	.570	.564	.557	.550	.543	.536	.530	.523	.516	.509	.502	.496	.489	.482
82	.605	.598	.591	.585	.578	.571	.564	.557	.551	.544	.537	.530	.523	.517
83	.640	.634	.627	.620	.613	.606	.600	.593	.586	.579	.572	.566	.559	.552
84	.677	.670	.663	.657	.650	.643	.636	.629	.623	.616	.609	.602	.595	.588
85	.715	.708	.701	.694	.687	.681	.674	.667	.660	.653	.646	.640	.633	.626

TABLE V,

For finding the Relative Humidity of the Air, from the readings of the dry t and wet bulb t' thermometers, at the mean barometric pressure of 29.7 inches.

Wet bulb t'	VALUES OF $t-t'$ IN DEGREES, FAHRENHEIT.													
	0	0.5	1	1.5	2	2.5	3	3.5	4	4.5	5	5.5	6	6.5
0	100	84	70	57	44	31	19	7						
1	100	85	71	58	46	33	22	11						
2	100	86	73	60	48	36	25	14	3					
3	100	87	74	61	50	38	28	17	7					
4	100	87	75	63	52	41	30	20	11	2				
5	100	88	76	64	54	43	33	23	14	5				
6	100	88	76	65	56	45	35	26	17	8				
7	100	88	77	67	57	47	37	28	19	11	4			
8	100	89	78	68	58	49	40	31	22	14	7			
9	100	89	78	69	60	51	42	33	25	17	10	2		
10	100	89	79	70	61	53	44	36	28	20	13	6		
11	100	90	79	71	62	54	46	38	30	23	16	9	3	
12	100	90	80	72	63	55	48	40	33	25	19	12	6	
13	100	90	81	73	65	57	49	41	35	28	21	15	9	3
14	100	91	82	74	66	58	50	43	36	30	23	18	12	6
15	100	91	83	75	67	59	52	45	39	33	26	20	15	9
16	100	91	83	76	68	61	54	47	41	35	29	23	17	12
17	100	92	84	76	69	62	56	49	43	37	31	26	20	15
18	100	92	84	77	70	63	57	51	44	39	33	28	23	18
19	100	92	85	78	71	64	58	52	46	41	35	30	24	20
20	100	93	86	79	72	65	59	53	48	42	37	32	27	22
21	100	93	86	79	72	66	60	55	49	44	39	34	29	25
22	100	93	86	80	73	67	61	56	51	46	41	36	31	27
23	100	93	87	80	74	68	63	57	52	47	42	37	33	29
24	100	93	87	81	75	69	64	59	53	49	44	39	35	31
25	100	93	87	81	75	70	65	60	55	50	45	41	37	33
26	100	94	88	82	76	71	66	61	56	51	47	42	38	35
27	100	94	88	82	77	72	67	62	57	53	48	41	40	36
28	100	94	88	82	77	72	68	63	58	54	50	46	42	38
29	100	94	88	83	78	73	68	64	59	55	51	47	44	40

TABLE V,

For finding the Relative Humidity of the Air, from the readings of the dry t and wet bulb t' thermometers, at the mean barometric pressure of 29.7 inches—(continued).

Wet bulb t'	VALUES OF $t-t'$ IN DEGREES, FAHRENHEIT.													
	7	7.5	8	8.5	9	9.5	10	10.5	11	11.5	12	12.5	13	13.5
0														
1														
2														
3														
4														
5														
6														
7														
8														
9														
10														
11														
12														
13														
14	1													
15	4													
16	7	2												
17	10	5	1											
18	13	8	4											
19	16	11	7	3										
20	18	13	9	6	2									
21	20	17	12	8	5	1								
22	23	19	14	11	7	4								
23	25	21	17	13	10	7	3							
24	27	23	19	16	13	9	6	3						
25	29	25	21	18	15	12	8	5	2					
26	31	27	23	20	17	14	11	8	5	2				
27	32	29	25	22	19	16	13	10	7	4	2			
28	34	30	27	24	21	18	15	12	9	7	4	1		
29	36	32	29	26	23	20	18	15	12	9	7	4	1	

TABLE V,

For finding the Relative Humidity of the Air, from the readings of the dry t and wet bulb t' thermometers, at the mean barometric pressure of 29.7 inches—(continued).

Wet bulb t' .	VALUES OF $t-t'$ IN DEGREES, FAHRENHEIT.																	
	0	0.5	1	1.5	2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5
30	100	91	90	85	79	74	69	64	60	56	53	49	45	41	37	31	28	
31	100	91	90	85	79	74	69	65	62	58	54	50	47	43	39	36	33	30
32	100	91	90	85	79	75	70	65	61	57	53	49	45	41	38	34	31	28
33	100	91	90	85	80	75	70	66	62	58	54	50	46	43	39	36	33	30
34	100	93	90	85	80	76	71	67	63	59	55	51	48	44	41	37	34	31
35	100	95	90	86	81	77	72	68	64	60	56	53	49	46	42	39	36	33
36	100	95	91	86	81	77	73	69	65	61	57	54	50	47	44	40	37	34
37	100	95	91	86	82	78	74	70	66	62	58	55	51	48	45	42	39	36
38	100	95	91	87	82	78	74	70	66	62	59	56	53	49	46	43	40	37
39	100	95	91	87	83	79	75	71	67	63	60	57	53	50	47	44	41	38
40	100	95	92	87	83	79	75	72	68	64	61	57	54	51	48	45	43	40
41	100	95	92	88	83	79	76	72	68	65	62	58	55	52	49	46	44	41
42	100	96	92	88	84	80	76	73	69	66	63	59	56	53	50	47	45	42
43	100	96	92	88	84	80	77	73	70	66	63	60	57	54	51	48	46	43
44	100	96	92	88	84	81	77	74	71	67	64	61	58	55	52	49	47	44
45	100	96	93	89	85	81	78	74	71	68	65	62	59	56	53	50	48	45
46	100	96	93	89	85	82	78	75	72	69	66	63	60	57	54	51	49	46
47	100	96	93	89	85	82	79	75	72	69	66	63	61	58	55	52	50	47
48	100	96	93	89	86	82	79	76	73	70	67	64	61	59	56	53	51	48
49	100	96	93	90	86	83	79	76	73	70	68	65	62	59	57	54	52	49
50	100	96	93	90	86	83	80	77	74	71	68	65	63	60	58	55	53	50
51	100	96	93	90	86	83	80	77	74	71	69	66	63	61	58	56	54	51
52	100	96	93	90	87	84	80	78	75	72	69	67	64	61	59	57	55	52
53	100	96	94	90	87	84	81	78	75	72	70	67	65	62	60	57	55	53
54	100	96	94	91	87	84	81	78	76	73	70	68	65	63	60	58	56	54
55	100	97	94	91	87	84	81	79	76	73	71	68	66	63	61	59	57	55
56	100	97	94	91	88	85	82	79	76	74	71	69	67	64	62	60	58	56
57	100	97	94	91	88	85	82	79	77	74	72	69	67	65	63	60	58	56
58	100	97	94	91	88	85	82	80	77	75	72	70	68	65	63	61	59	57
59	100	97	94	91	88	85	83	80	78	75	73	70	68	66	64	62	60	58

TABLE V,

For finding the Relative Humidity of the Air from the readings of the dry t and wet bulb t' thermometers, at the mean barometric pressure of 29.7 inches—(continued).

Wet bulb t' .	VALUES OF $t-t'$ IN DEGREES, FAHRENHEIT.																		
	9	9.5	10	10.5	11	11.5	12	12.5	13	13.5	14	14.5	15	15.5	16	16.5	17	17.5	
30	25	22	20	17	15	12	9	7	5	8	1								
31	27	24	22	19	16	14	12	9	7	5	3	1							
32	25	22	19	16	13	11	9	6	4	2									
33	27	24	21	18	15	13	11	8	6	4	2								
34	28	25	23	20	17	15	13	10	8	6	4	2							
35	30	27	25	22	19	17	15	12	10	8	6	4	2	1					
36	31	29	26	24	21	19	16	14	12	10	8	6	5	3	1				
37	33	30	28	25	23	20	18	16	14	12	10	8	6	5	3	1			
38	34	32	29	27	24	22	20	18	16	14	12	10	8	6	5	3	2	1	
39	36	33	31	28	26	24	22	20	18	16	14	12	10	8	7	5	4	2	
40	37	35	32	30	28	26	24	22	19	18	16	14	12	10	9	7	6	4	
41	38	36	34	31	29	27	25	23	21	19	18	16	14	12	10	9	7	6	
42	40	37	35	33	31	29	27	25	23	21	19	17	15	14	12	11	9	8	
43	41	39	36	34	32	30	28	26	24	22	21	19	17	15	14	12	11	9	
44	42	40	38	36	34	32	30	28	26	24	22	20	18	17	15	14	12	11	
45	43	41	39	37	35	33	31	29	27	25	23	22	20	18	17	15	14	13	
46	44	42	40	38	36	34	32	30	28	26	25	23	21	20	18	17	15	14	
47	45	43	41	39	37	35	33	31	29	28	26	24	23	21	20	18	17	15	
48	46	44	42	40	38	36	34	32	31	29	27	25	24	22	21	19	18	17	
49	47	45	43	41	39	37	35	33	32	30	28	27	25	24	22	20	19	18	
50	48	46	44	42	40	38	36	35	33	31	30	28	26	25	23	22	21	19	
51	49	47	45	43	41	39	38	36	34	32	31	29	28	26	24	23	22	21	
52	50	48	46	44	42	40	39	37	35	33	32	30	29	27	26	24	23	22	
53	51	49	47	45	43	41	40	38	36	34	33	31	30	28	27	26	24	23	
54	52	50	48	46	44	42	40	39	37	35	34	32	31	29	28	27	26	24	
55	53	51	49	47	45	43	41	40	38	37	36	34	32	31	29	28	27	25	
56	53	52	49	48	46	44	42	41	39	38	36	35	33	32	30	29	28	26	
57	54	52	50	48	47	45	43	42	40	39	37	36	34	33	31	30	29	27	
58	55	53	51	49	47	46	44	43	42	40	38	37	35	34	32	31	30	28	
59	56	54	52	49	48	46	45	43	42	41	39	38	36	35	33	32	31	29	

TABLE V,

For finding the Relative Humidity of the Air from the readings of the dry t and wet bulb t' thermometers at the mean barometric pressure of 29.7 inches - (continued).

Wet bulb t' .	VALUES OF $t-t'$ IN DEGREES, FAHRENHEIT.																	
	18	18.5	19	19.5	20	20.5	21	21.5	22	22.5	23	23.5	24	24.5	25	25.5	26	26.5
30																		
31																		
32																		
33																		
34																		
35																		
36																		
37																		
38																		
39	1																	
40	3	1																
41	4	3	2	1														
42	6	5	4	2	1													
43	8	7	5	4	3	1	1											
44	10	8	7	6	5	3	2	1										
45	11	10	9	7	6	5	4	3	2	1								
46	13	11	10	9	8	7	5	4	3	1	1							
47	14	13	12	10	9	8	7	6	5	4	3	2	1					
48	15	14	13	12	10	9	8	7	6	5	4	4	3	2	1			
49	17	16	14	13	12	11	10	9	8	7	6	5	4	3	2	1	1	
50	18	17	15	14	13	12	11	10	9	8	7	6	5	5	4	3	2	1
51	19	18	17	16	15	13	12	11	10	10	9	8	7	6	5	4	3	3
52	21	19	18	17	16	15	14	13	12	11	10	9	8	7	6	6	5	4
53	22	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	6	5
54	23	22	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	6
55	24	23	22	20	19	18	17	16	15	14	13	13	12	11	10	9	8	8
56	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	9
57	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	10
58	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	12	11
59	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	13	12

TABLE V,

For finding the Relative Humidity of the Air from the readings of the dry t and wet bulb t' thermometers, at the mean barometric pressure of 29.7 inches—(continued).

Wet bulb t' .	VALUES OF $t-t'$ IN DEGREES, FAHRENHEIT.																	
	0	0.5	1	1.5	2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5
60	100	97	94	91	89	86	83	80	78	76	73	71	68	66	64	62	60	58
61	100	97	94	92	90	86	84	81	78	76	73	71	69	67	65	63	61	59
62	100	97	94	92	90	86	84	81	79	76	74	72	70	67	65	63	61	59
63	100	97	95	92	90	87	84	81	79	77	74	72	70	68	66	64	62	60
64	100	97	95	92	90	87	84	82	79	77	75	73	70	68	66	64	62	60
65	100	97	95	92	90	87	85	82	80	77	75	73	71	69	67	65	63	61
66	100	97	95	92	90	87	85	82	80	78	76	73	71	69	67	65	63	61
67	100	97	95	92	90	87	85	83	80	78	76	74	72	70	68	66	64	62
68	100	97	95	92	90	88	85	83	81	78	76	74	72	70	68	66	64	62
69	100	97	95	92	90	88	85	83	81	79	76	74	72	71	69	67	65	63
70	100	97	95	93	90	88	86	83	81	79	77	75	73	71	69	67	65	63
71	100	98	95	93	90	88	86	84	81	79	77	75	73	71	70	68	66	64
72	100	98	95	93	90	88	86	84	82	79	77	75	74	72	70	68	66	64
73	100	98	95	93	90	88	86	84	82	80	78	76	74	72	70	68	67	65
74	100	98	95	93	91	88	86	84	82	80	78	76	74	72	71	69	67	65
75	100	98	95	93	91	89	86	84	82	80	78	76	74	73	71	69	67	65
76	100	98	95	93	91	89	87	85	82	80	78	77	75	73	71	69	68	66
77	100	98	95	93	91	89	87	85	83	81	79	77	75	73	72	70	68	66
78	100	98	95	93	91	89	87	85	83	81	79	77	75	74	72	70	68	67
79	100	98	96	93	91	89	87	85	83	81	79	77	76	74	72	70	69	67
80	100	98	96	93	91	89	87	85	83	81	79	78	76	74	72	71	69	68
81	100	98	96	93	91	89	87	85	83	81	80	78	76	74	73	71	69	68
82	100	98	96	94	91	89	87	85	84	82	80	78	76	75	73	71	70	68
83	100	98	96	94	91	89	88	86	84	82	80	78	77	75	73	72	70	69
84	100	98	96	94	92	90	88	86	84	82	80	79	77	76	74	72	70	69
85	100	98	96	94	92	90	88	86	84	82	81	79	77	76	74	72	71	69
86	100	98	96	94	92	90	88	86	84	82	81	79	77	76	74	73	71	70
87	100	98	96	94	92	90	88	86	84	83	81	79	78	76	74	73	71	70
88	100	98	96	94	92	90	88	86	85	83	81	79	78	76	75	73	72	70
89	100	98	96	94	92	90	88	86	85	83	81	80	78	77	75	73	72	71

TABLE V,

For finding the Relative Humidity of the Air from the readings of the dry t and wet bulb t' thermometers, at the mean barometric pressure of 29.7 inches—(continued).

Wet bulb t' .	VALUES OF $t-t'$ IN DEGREES, FAHRENHEIT.																	
	9	9.5	10	10.5	11	11.5	12	12.5	13	13.5	14	14.5	15	15.5	16	16.5	17	17.5
60	56	54	53	51	49	47	46	44	43	41	40	38	37	35	34	33	31	30
61	57	55	53	52	50	48	46	45	43	42	40	39	38	36	35	34	32	31
62	57	56	54	52	51	49	47	45	44	43	41	40	38	37	36	34	33	32
63	58	56	55	53	51	50	48	46	45	44	42	41	39	38	37	35	34	33
64	58	57	55	54	52	50	49	47	46	44	43	41	40	38	37	36	35	34
65	59	57	56	54	53	51	49	48	46	45	43	42	41	40	38	37	36	35
66	60	58	58	55	53	52	50	48	47	46	44	43	42	40	39	38	36	35
67	60	59	57	55	54	52	51	49	48	46	45	44	42	41	40	39	37	36
68	61	59	58	56	54	53	51	50	48	47	45	44	43	41	40	39	38	37
69	61	60	58	57	55	53	52	50	49	47	46	45	44	42	41	40	39	38
70	61	60	58	57	56	54	52	51	49	48	47	45	44	43	42	40	39	38
71	62	60	59	58	56	55	53	52	50	49	47	46	45	44	42	41	40	39
72	62	61	60	58	57	55	54	52	51	49	48	47	45	44	43	42	41	39
73	63	61	60	59	57	56	54	53	51	50	49	47	46	45	44	43	41	40
74	63	62	60	59	58	56	55	53	52	50	49	48	47	45	44	43	42	41
75	64	62	61	59	58	57	55	54	52	51	50	48	47	46	45	44	43	42
76	64	63	61	60	58	57	56	54	53	51	50	49	48	46	45	44	43	42
77	65	63	62	60	59	57	56	55	53	52	51	49	48	47	46	45	44	43
78	65	64	62	61	59	58	56	55	54	52	51	50	49	48	47	45	44	43
79	66	64	63	61	60	58	57	56	54	53	52	50	49	48	47	46	45	44
80	66	65	63	62	60	59	57	56	55	53	52	51	50	49	47	46	45	44
81	66	65	63	62	61	59	58	57	55	54	53	51	50	49	48	47	46	45
82	67	65	64	62	61	60	58	57	56	54	53	52	51	50	48	47	46	45
83	67	66	64	63	61	60	59	57	56	55	54	52	51	50	49	48	47	46
84	67	66	64	63	62	60	59	58	56	55	54	53	52	51	49	48	47	46
85	68	66	65	63	62	61	59	58	57	55	54	53	52	51	50	49	48	47
86	68	67	65	64	62	61	60	59	57	56	55	54	52	51	50	49	48	47
87	68	67	65	64	63	61	60	59	58	56	55	54	53	52	51	50	49	48
88	69	67	66	64	63	62	60	59	58	57	56	54	53	52	51	50	49	48
89	69	68	66	65	63	62	61	60	58	57	56	55	54	53	52	50	49	48

TABLE V,

For finding the Relative Humidity of the Air from the readings of the dry t and wet bulb t' thermometers, at the mean barometric pressure of 29.7 inches—(continued).

Wet bulb t' .	VALUES OF $t - t'$ IN DEGREES, FAHRENHEIT.																		
	18	18.5	19	19.5	20	20.5	21	21.5	22	22.5	23	23.5	24	24.5	25	25.5	26	26.5	
60	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	15	14	13	
61	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	16	15	14	
62	31	30	29	28	26	26	25	24	23	22	21	20	19	18	17	17	16	15	
63	32	31	30	28	27	26	26	25	23	23	22	21	20	19	18	18	17	16	
64	33	32	30	29	28	27	28	25	24	23	23	22	21	20	19	18	18	17	
65	33	32	31	30	29	28	27	26	25	24	23	23	22	21	20	19	19	18	
66	34	33	32	31	30	29	28	27	26	25	24	23	23	22	21	20	19	19	
67	35	34	33	32	31	30	29	28	27	26	25	24	23	23	22	21	20	20	
68	36	35	34	33	32	31	30	29	28	27	26	25	24	23	23	22	21	20	
69	36	35	34	33	32	31	30	29	28	27	27	26	25	24	23	23	22	21	
70	37	36	35	34	33	32	31	30	29	28	27	26	26	25	24	23	23	22	
71	38	37	36	35	34	33	32	31	30	29	28	27	26	26	25	24	23	22	
72	38	37	36	35	34	33	32	32	31	30	29	28	27	26	26	25	24	23	
73	39	38	37	36	35	34	33	32	31	30	29	29	28	27	26	25	25	24	
74	40	39	38	37	36	35	34	33	32	31	30	29	29	28	27	26	25	24	
75	40	39	38	37	36	35	34	33	33	32	31	30	29	28	28	27	26	25	
76	41	40	39	38	37	36	35	34	33	32	31	31	30	29	28	27	27	26	
77	42	41	40	39	38	37	36	35	34	33	32	31	30	29	29	28	27	26	
78	42	41	40	39	38	37	36	35	34	34	33	32	31	30	30	29	28	27	
79	43	42	41	40	39	38	37	36	35	34	33	32	31	31	30	29	29	28	
80	43	42	41	40	39	38	38	37	36	35	34	33	32	32	31	30	29	28	
81	44	43	42	41	40	39	38	37	36	35	34	34	33	32	31	30	30	29	
82	44	43	42	41	40	39	39	38	37	36	35	34	33	33	32	31	30	29	
83	45	44	43	42	41	40	39	38	37	37	36	35	34	33	32	31	31	30	
84	45	44	43	42	41	40	40	39	38	37	36	35	35	34	33	32	31	31	
85	46	45	44	43	42	41	40	39	38	38	37	36	35	34	33	33	32	31	
86	46	45	44	43	42	41	41	40	39	38	37	36	36	35	34	33	33	32	
87	47	46	45	44	43	42	41	40	39	39	38	37	36	35	34	34	33	32	
88	47	46	45	44	43	42	42	41	40	39	38	37	36	36	35	34	34	33	
89	47	46	45	45	44	43	42	41	40	40	39	38	37	36	35	35	34	33	

TABLE V,

For finding the Relative Humidity of the Air from the readings of the dry t and wet bulb t' thermometers, at the mean barometric pressure of 29.7 inches—(continued).

Wet bulb t' .	VALUES OF $t-t'$ IN DEGREES, FAHRENHEIT.																	
	27	27.5	28	28.5	29	29.5	30	30.5	31	31.5	32	32.5	33	33.5	34	34.5	35	35.5
55	7	6	6	5	5	4	3	3	2	2	1	1						
56	8	7	7	6	6	5	4	4	3	3	2	2	1	1				
57	9	8	8	7	7	6	5	5	4	4	3	3	2	2	1	1		
58	10	9	9	8	8	7	6	6	5	5	4	4	3	3	2	2	1	1
59	11	10	10	9	9	8	7	7	6	6	5	5	4	4	3	3	2	2
60	12	11	11	10	9	9	8	8	7	7	6	6	5	5	4	4	3	3
61	13	12	12	11	10	10	9	9	8	8	7	7	6	6	5	5	4	4
62	14	13	13	12	11	11	10	10	9	9	8	8	7	7	6	6	5	5
63	15	14	14	13	12	12	11	10	10	9	9	8	8	8	7	7	6	6
64	16	15	15	14	13	13	12	11	11	10	10	9	9	8	8	7	7	6
65	17	16	16	15	14	14	13	12	12	11	11	10	10	9	9	8	8	7
66	18	17	17	16	15	15	14	13	13	12	12	11	11	10	10	9	9	8
67	19	18	17	17	16	15	15	14	14	13	13	12	11	11	10	10	9	9
68	20	19	18	18	17	16	16	15	15	14	13	13	12	12	11	11	10	10
69	21	20	19	18	18	17	16	16	15	15	14	14	13	13	12	12	11	11
70	21	21	20	19	19	18	17	17	16	16	15	15	14	14	13	12	12	
71	22	21	21	20	19	19	18	17	17	16	16	15	15	14	14	13	12	
72	23	22	21	21	20	19	19	18	17	17	16	16	15	15	14	13	13	
73	23	23	22	21	21	20	19	19	18	18	17	17	16	16	15	15	14	
74	24	23	23	22	21	21	20	19	19	18	18	17	17	16	16	15	14	
75	24	24	23	23	22	21	21	20	19	19	18	18	17	17	16	16	15	
76	25	24	24	23	23	22	21	21	20	20	19	19	18	18	17	17	16	
77	26	25	25	24	23	23	22	21	21	20	20	19	19	18	18	17	16	
78	26	26	25	25	24	23	23	22	21	21	20	20	19	19	18	17	17	
79	27	26	26	25	25	24	23	23	22	22	21	21	20	20	19	19	18	
80	28	27	26	26	25	25	24	23	23	22	22	21	21	20	20	19	19	
81	28	28	27	26	26	25	25	24	23	23	22	22	21	21	20	20	19	
82	29	28	28	27	26	26	25	25	24	23	23	22	22	21	21	20	20	
83	29	29	28	27	27	26	26	25	24	24	23	23	22	22	21	21	20	
84	30	29	29	28	27	27	26	26	25	24	24	23	23	22	22	21	21	
85	30	30	29	28	28	27	27	26	25	25	24	24	23	23	22	22	21	

TABLE V,

For finding the Relative Humidity of the Air from the readings of the dry t and wet bulb t' thermometers, at the mean barometric pressure of 29.7 inches—(concluded).

Wet bulb t' .	VALUES OF $t - t'$ IN DEGREES, FAHRENHEIT.													
	36	36.5	37	37.5	38	38.5	39	39.5	40	40.5	41	41.5	42	42.5
55														
56														
57														
58														
59	1	1												
60	2	2	1	1	1									
61	3	3	2	2	2	1	1							
62	4	4	3	3	3	2	2	1	1	1				
63	5	5	4	4	3	3	3	2	2	2	1	1	1	1
64	6	5	5	5	4	4	4	3	3	3	2	2	2	1
65	7	6	6	6	5	5	5	4	4	3	3	3	2	2
66	8	7	7	6	6	6	5	5	5	4	4	4	3	3
67	9	8	8	7	7	7	6	6	5	5	5	4	4	4
68	9	9	9	8	8	7	7	6	6	6	5	5	5	4
69	10	10	9	9	8	8	8	7	7	6	6	6	5	5
70	11	11	10	10	9	9	8	8	8	7	7	6	6	6
71	12	11	11	10	10	10	9	9	8	8	7	7	7	6
72	12	12	11	11	11	10	10	9	9	9	8	8	8	7
73	13	13	12	12	11	11	10	10	10	9	9	8	8	8
74	14	13	13	12	12	12	11	11	10	10	9	9	9	8
75	14	14	13	13	13	12	12	11	11	11	10	10	10	9
76	15	15	14	14	13	13	12	12	12	11	11	10	10	10
77	16	15	15	14	14	13	13	13	12	12	11	11	11	10
78	16	16	15	15	15	14	14	13	13	12	12	12	11	11
79	17	17	16	16	15	15	14	14	13	13	12	12	12	12
80	18	17	17	16	16	15	15	14	14	14	13	13	13	12
81	18	18	17	17	16	16	15	15	15	14	14	13	13	13
82	19	18	18	17	17	16	16	16	15	15	14	14	14	13
83	19	19	18	18	17	17	17	16	16	15	15	14	14	14
84	20	19	19	18	18	17	17	17	16	16	15	15	15	14
85	20	20	19	19	18	18	18	17	17	16	16	15	15	15

TABLE VI,

For finding the Tension of Vapour in the Air, in English inches, from the readings of the dry t and wet bulb t' thermometers, at the mean barometric pressure of 27.7 inches and in the latitude of 22°.

Wet bulb t' .	VALUES OF $t-t'$ IN DEGREES, FAHRENHEIT.														
	0	0.5	1	1.5	2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7
23	'123	'117	'112	'106	'101	'095	'090	'084	'079	'073	'068	'062	'057	'051	'046
24	'128	'123	'117	'112	'106	'101	'095	'090	'084	'079	'073	'068	'062	'057	'051
25	'134	'128	'123	'117	'112	'106	'101	'095	'090	'085	'079	'074	'068	'063	'057
26	'140	'134	'129	'123	'118	'112	'107	'101	'096	'090	'085	'080	'074	'069	'063
27	'146	'141	'135	'130	'124	'119	'113	'108	'102	'097	'091	'086	'080	'075	'069
28	'153	'147	'142	'136	'131	'125	'120	'114	'109	'103	'098	'092	'087	'081	'076
29	'159	'154	'148	'143	'137	'132	'126	'121	'115	'110	'104	'099	'083	'088	'082
30	'167	'161	'155	'150	'144	'139	'133	'128	'122	'117	'111	'106	'100	'095	'089
31	'174	'168	'163	'157	'152	'146	'141	'135	'130	'124	'119	'113	'108	'102	'097
32	'182	'175	'169	'163	'157	'151	'145	'139	'133	'127	'121	'115	'109	'103	'097
33	'189	'183	'177	'171	'165	'159	'152	'146	'140	'134	'128	'122	'116	'110	'104
34	'196	'190	'184	'178	'172	'166	'160	'154	'148	'142	'135	'129	'123	'117	'111
35	'204	'198	'192	'186	'180	'174	'168	'162	'155	'149	'143	'137	'131	'125	'110
36	'213	'206	'200	'194	'188	'182	'176	'170	'164	'157	'151	'145	'139	'133	'127
37	'221	'215	'209	'203	'197	'190	'184	'178	'172	'166	'160	'154	'148	'141	'135
38	'230	'221	'218	'211	'205	'199	'193	'187	'181	'175	'168	'162	'156	'150	'144
39	'239	'233	'227	'220	'214	'208	'202	'196	'190	'184	'177	'171	'165	'159	'153
40	'248	'242	'236	'230	'224	'218	'211	'205	'199	'193	'187	'181	'175	'168	'162
41	'258	'252	'246	'239	'233	'227	'221	'215	'209	'203	'196	'190	'184	'178	'172
42	'268	'262	'256	'250	'243	'237	'231	'225	'219	'213	'206	'200	'194	'188	'182
43	'278	'272	'266	'260	'254	'248	'241	'235	'229	'223	'217	'211	'204	'198	'192
44	'289	'283	'277	'270	'264	'258	'252	'246	'240	'234	'227	'221	'215	'209	'203
45	'300	'294	'288	'282	'276	'270	'263	'257	'251	'245	'239	'233	'226	'220	'214
46	'312	'306	'299	'293	'287	'281	'275	'268	'262	'256	'250	'244	'238	'231	'225
47	'324	'317	'311	'305	'299	'293	'286	'280	'274	'268	'262	'256	'249	'243	'237
48	'336	'330	'323	'317	'311	'305	'299	'293	'286	'280	'274	'268	'262	'255	'249
49	'349	'342	'336	'330	'324	'318	'311	'305	'299	'293	'287	'280	'274	'268	'263
50	'362	'356	'349	'343	'337	'331	'325	'319	'312	'306	'300	'294	'288	'282	'276
51	'375	'369	'363	'357	'351	'344	'338	'332	'326	'320	'314	'307	'301	'295	'289
52	'389	'383	'377	'371	'365	'358	'352	'346	'340	'334	'328	'321	'315	'309	'303

TABLE VI.

For finding the Tension of Vapour in the Air, in English inches, from the readings of the dry t and wet bulb t' thermometers, at the mean barometric pressure of 27.7 inches and in the latitude of 22°—(continued).

Wet bulb t' .	VALUES OF $t-t'$ IN DEGREES, FAHRENHEIT.																	
	7.5	8	8.5	9	9.5	10	10.5	11	11.5	12	12.5	13	13.5	14	14.5	15	15.5	16
23	.040	.035	.030	.024	.019	.013	.008	.002										
24	.046	.040	.035	.029	.024	.018	.013	.008	.002									
25	.052	.046	.041	.035	.030	.024	.019	.013	.008	.002								
26	.058	.052	.047	.041	.036	.030	.025	.019	.014	.008	.003							
27	.064	.058	.053	.047	.042	.036	.031	.025	.020	.014	.009	.003						
28	.070	.065	.060	.054	.049	.043	.037	.032	.026	.021	.015	.010	.004					
29	.077	.071	.066	.060	.055	.049	.044	.038	.033	.027	.022	.016	.011	.005				
30	.084	.078	.073	.067	.062	.056	.051	.045	.040	.034	.029	.023	.018	.012	.007			
31	.091	.086	.080	.075	.069	.064	.058	.053	.047	.042	.036	.031	.025	.020	.014	.009	.003	
32	.091	.085	.079	.073	.066	.060	.054	.048	.042	.036	.030	.024	.018	.012	.006			
33	.098	.092	.086	.080	.074	.068	.062	.056	.049	.043	.037	.031	.025	.019	.013	.007		
34	.105	.099	.093	.087	.080	.074	.068	.062	.056	.050	.044	.038	.032	.026	.019	.015	.007	
35	.113	.107	.103	.094	.088	.082	.076	.071	.064	.058	.052	.046	.039	.033	.027	.021	.015	.009
36	.121	.115	.109	.102	.096	.090	.084	.078	.072	.066	.060	.053	.047	.041	.035	.029	.023	.017
37	.129	.123	.117	.111	.105	.099	.092	.086	.080	.074	.068	.062	.056	.050	.043	.037	.031	.025
38	.138	.132	.126	.110	.113	.107	.101	.095	.089	.083	.077	.070	.064	.058	.052	.046	.040	.034
39	.147	.141	.135	.128	.122	.116	.110	.104	.098	.092	.085	.079	.073	.067	.061	.055	.049	.043
40	.156	.150	.144	.138	.132	.125	.119	.113	.107	.101	.095	.088	.082	.076	.070	.064	.058	.052
41	.166	.160	.153	.147	.141	.135	.129	.123	.117	.110	.104	.098	.092	.086	.080	.074	.067	.061
42	.176	.170	.163	.157	.151	.145	.139	.133	.127	.120	.114	.108	.102	.096	.090	.083	.077	.071
43	.186	.180	.174	.167	.161	.155	.149	.143	.137	.131	.124	.118	.112	.106	.100	.094	.087	.081
44	.196	.190	.184	.178	.172	.166	.160	.153	.147	.141	.135	.129	.123	.117	.110	.104	.098	.092
45	.208	.202	.196	.189	.183	.177	.171	.165	.159	.152	.146	.140	.134	.128	.122	.115	.109	.103
46	.219	.213	.207	.201	.194	.188	.182	.176	.170	.164	.157	.151	.145	.139	.133	.127	.120	.114
47	.231	.225	.218	.212	.206	.200	.194	.188	.181	.175	.169	.163	.157	.151	.144	.138	.132	.126
48	.243	.237	.231	.225	.218	.212	.206	.200	.194	.187	.181	.175	.169	.163	.157	.150	.144	.138
49	.256	.250	.243	.237	.231	.225	.219	.212	.206	.200	.194	.188	.181	.175	.169	.163	.157	.151
50	.269	.263	.257	.251	.245	.239	.232	.226	.220	.214	.208	.202	.196	.189	.183	.177	.171	.165
51	.283	.277	.271	.264	.258	.252	.246	.240	.234	.227	.221	.215	.209	.203	.197	.190	.184	.178
52	.297	.291	.284	.278	.272	.266	.260	.254	.247	.241	.235	.229	.223	.217	.210	.204	.198	.192

TABLE VI,

For finding the Tension of Vapour in the Air, in English inches, from the readings of the dry t and wet bulb t' thermometers, at the mean barometric pressure of 277. inches and in the latitude of 22°—(continued).

Wet bulb t'	VALUES OF $t-t'$ IN DEGREES, FAHRENHEIT.																		
	16.5	17	17.5	18	18.5	19	19.5	20	20.5	21	21.5	22	22.5	23	23.5	24	24.5	25	
23																			
24																			
25																			
26																			
27																			
28																			
29																			
30																			
31																			
32																			
33																			
34																			
35	·003																		
36	·011	·005																	
37	·019	·013	·007																
38	·028	·021	·015	·009	·003														
39	·036	·030	·024	·018	·012	·006													
40	·046	·039	·033	·027	·021	·015	·009	·003											
41	·055	·049	·043	·037	·030	·024	·018	·012	·006										
42	·065	·059	·053	·047	·040	·034	·028	·022	·016	·010	·004								
43	·075	·069	·063	·057	·051	·044	·038	·032	·026	·020	·014	·007	·001						
44	·086	·080	·073	·067	·061	·055	·049	·043	·036	·030	·024	·018	·012	·006					
45	·097	·091	·085	·078	·072	·066	·060	·054	·048	·041	·035	·029	·023	·017	·011	·004			
46	·108	·102	·096	·089	·083	·077	·071	·065	·059	·052	·046	·040	·034	·028	·022	·015	·008	·003	
47	·120	·113	·107	·101	·095	·089	·083	·078	·070	·064	·058	·052	·045	·039	·033	·027	·021	·015	
48	·132	·126	·119	·113	·107	·101	·095	·088	·082	·076	·070	·064	·058	·051	·045	·039	·032	·027	
49	·144	·138	·132	·126	·120	·113	·107	·101	·095	·089	·083	·076	·070	·064	·058	·051	·045	·039	
50	·156	·152	·146	·140	·134	·128	·122	·116	·109	·103	·097	·091	·085	·079	·072	·066	·060	·054	
51	·172	·166	·160	·153	·147	·141	·135	·129	·123	·116	·110	·104	·098	·092	·086	·079	·073	·067	
52	·186	·180	·173	·167	·161	·155	·149	·143	·136	·130	·124	·118	·112	·106	·099	·093	·087	·081	

TABLE VI,

For finding the Tension of Vapour in the Air, in English inches, from the readings of the dry t and wet bulb t' thermometers, at the mean barometric pressure of 27.7 inches and in the latitude of 22°—(continued).

Wet bulb t' .	VALUES OF $t-t'$ IN DEGREES, FAHRENHEIT.														
	0	0.5	1	1.5	2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7
53	·404	·398	·391	·385	·379	·373	·367	·361	·354	·348	·342	·336	·330	·323	·317
54	·419	·413	·406	·400	·394	·388	·382	·375	·369	·363	·357	·351	·344	·338	·332
55	·434	·428	·422	·416	·409	·403	·397	·391	·385	·378	·372	·366	·360	·354	·348
56	·450	·444	·438	·432	·425	·419	·413	·407	·401	·394	·388	·382	·376	·370	·363
57	·467	·460	·454	·448	·442	·436	·429	·423	·417	·411	·405	·398	·392	·386	·380
58	·484	·477	·471	·465	·459	·453	·446	·440	·434	·428	·422	·416	·409	·403	·397
59	·501	·495	·489	·483	·476	·470	·464	·458	·451	·445	·439	·433	·427	·420	·414
60	·518	·513	·507	·501	·494	·488	·482	·476	·470	·463	·457	·451	·445	·439	·432
61	·535	·532	·525	·519	·513	·507	·501	·494	·488	·482	·476	·470	·463	·457	·451
62	·552	·551	·545	·538	·532	·526	·520	·513	·507	·501	·495	·488	·482	·476	·470
63	·577	·571	·565	·558	·552	·546	·540	·533	·527	·521	·515	·508	·502	·496	·490
64	·598	·591	·585	·579	·573	·566	·560	·554	·548	·541	·535	·529	·523	·517	·510
65	·619	·613	·606	·600	·594	·588	·581	·575	·569	·563	·556	·550	·544	·538	·531
66	·641	·634	·628	·622	·616	·609	·603	·597	·591	·584	·578	·572	·566	·559	·553
67	·663	·657	·651	·644	·638	·632	·626	·619	·613	·607	·601	·594	·588	·582	·576
68	·686	·680	·674	·667	·661	·655	·649	·642	·636	·630	·624	·617	·611	·605	·599
69	·710	·704	·698	·691	·685	·679	·673	·666	·660	·654	·647	·641	·635	·629	·622
70	·735	·729	·722	·716	·710	·703	·697	·691	·685	·678	·672	·666	·660	·653	·647
71	·760	·754	·748	·741	·735	·729	·723	·716	·710	·704	·697	·691	·685	·679	·672
72	·786	·780	·774	·767	·761	·755	·749	·742	·736	·730	·724	·717	·711	·705	·698
73	·813	·807	·801	·794	·788	·782	·776	·769	·763	·757	·750	·744	·738	·731	·725
74	·841	·835	·828	·822	·816	·810	·803	·797	·791	·784	·778	·772	·765	·759	·753
75	·870	·863	·857	·851	·844	·838	·832	·825	·819	·813	·807	·800	·794	·788	·781
76	·899	·893	·886	·880	·874	·867	·861	·855	·849	·842	·836	·830	·823	·817	·811
77	·929	·923	·917	·910	·904	·898	·891	·885	·879	·872	·866	·860	·853	·847	·841
78	·960	·954	·948	·941	·935	·929	·923	·916	·910	·904	·897	·891	·885	·878	·872
79	·993	·988	·980	·974	·967	·961	·955	·948	·942	·936	·929	·923	·917	·910	·904
80	1·026	1·019	1·013	1·007	1·000	·994	·988	·981	·975	·969	·962	·956	·950	·943	·937
81	1·060	1·053	1·047	1·041	1·034	1·028	1·022	1·015	1·009	1·003	·996	·990	·984	·977	·971
82	1·095	1·088	1·082	1·076	1·069	1·063	1·057	1·050	1·044	1·038	1·031	1·025	1·018	1·012	1·006

TABLE VI,

For finding the Tension of Vapour in the Air, in English inches, from the readings of the dry t and wet bulb t' thermometers, at the mean barometric pressure of 27.7 inches and in the latitude of 22°—(continued).

Wet bulb t' .	VALUES OF $t-t'$ IN DEGREES, FAHRENHEIT.																	
	7.5	8	8.5	9	9.5	10	10.5	11	11.5	12	12.5	13	13.5	14	14.5	15	15.5	16
53	311	305	299	293	286	280	274	268	262	256	249	243	237	231	225	219	212	206
54	320	320	314	307	301	295	289	283	277	270	264	258	252	246	240	233	227	221
55	341	335	329	323	317	310	304	298	292	286	280	273	267	261	255	249	242	236
56	357	351	345	339	332	326	320	314	308	302	296	289	283	277	271	264	258	252
57	374	368	361	355	349	343	337	330	324	318	312	306	299	293	287	281	275	268
58	391	384	378	372	366	360	353	347	341	335	329	322	316	310	304	298	291	285
59	408	403	396	389	383	377	371	365	358	352	346	340	334	327	321	315	309	302
60	426	420	414	407	401	395	389	383	376	370	364	358	352	345	339	333	327	320
61	445	438	432	426	420	414	407	401	395	389	382	376	370	364	358	351	345	339
62	463	457	451	445	438	432	426	420	414	407	401	395	389	382	376	370	364	357
63	483	477	471	465	458	452	446	440	433	427	421	415	408	402	396	390	383	377
64	501	498	492	485	479	473	467	460	454	448	442	435	429	423	417	411	404	398
65	525	519	513	506	500	494	488	481	475	469	463	456	450	444	438	431	425	419
66	547	541	534	528	522	516	509	503	497	491	484	478	472	466	459	453	447	441
67	569	563	557	551	544	538	532	526	519	513	507	500	494	488	482	475	469	463
68	592	586	580	574	567	561	555	549	542	536	530	524	517	511	505	498	492	486
69	616	610	604	597	591	585	579	572	566	560	553	547	541	535	528	522	516	510
70	641	634	628	622	616	609	603	597	591	584	578	572	565	559	553	547	540	534
71	666	660	653	647	641	635	628	622	616	610	603	597	591	584	578	572	566	559
72	692	686	680	673	667	661	654	648	642	636	629	623	617	610	604	598	592	585
73	719	713	706	700	694	687	681	675	669	662	656	650	643	637	631	625	618	612
74	747	740	734	728	721	715	709	703	696	690	684	677	671	665	658	652	646	640
75	775	769	762	756	750	744	737	731	725	718	712	706	700	693	687	681	674	668
76	801	798	792	785	779	773	767	760	754	748	741	735	729	722	716	710	703	697
77	835	828	822	816	809	803	797	790	784	778	771	765	759	752	746	740	734	727
78	866	859	853	847	840	834	828	821	815	809	802	796	790	783	777	771	765	758
79	898	891	885	879	872	866	860	853	847	841	834	828	822	816	809	803	797	790
80	931	924	918	912	905	899	893	886	880	874	867	861	855	848	842	836	829	823
81	965	958	952	946	939	933	927	920	914	908	901	895	889	882	876	869	863	857
82	999	993	987	980	974	968	961	955	949	942	936	930	923	917	911	904	898	892

TABLE VI.

For finding the Tension of Vapour in the Air, in English inches, from the readings of the dry t and wet bulb t' thermometers, at the mean barometric pressure of 27.7 inches and in the latitude of 22°—(continued).

Wet bulb t' .	VALUES OF $t - t'$ IN DEGREES, FAHRENHEIT.																	
	16.5	17	17.5	18	18.5	19	19.5	20	20.5	21	21.5	22	22.5	23	23.5	24	24.5	25
53	·200	·194	·188	·182	·175	·169	·163	·157	·151	·144	·138	·132	·126	·120	·114	·107	·101	·095
54	·215	·209	·202	·196	·190	·184	·178	·172	·166	·159	·153	·147	·141	·134	·128	·122	·116	·110
55	·230	·224	·218	·212	·205	·199	·193	·187	·181	·174	·168	·162	·156	·150	·143	·137	·131	·125
56	·246	·240	·233	·227	·221	·215	·209	·202	·196	·190	·184	·178	·172	·165	·159	·153	·147	·141
57	·262	·256	·250	·244	·237	·231	·225	·219	·213	·206	·200	·194	·188	·182	·175	·169	·163	·157
58	·279	·273	·267	·260	·254	·248	·242	·236	·229	·223	·217	·211	·205	·198	·192	·186	·180	·174
59	·296	·290	·284	·278	·271	·265	·259	·253	·247	·240	·234	·228	·222	·216	·209	·203	·197	·191
60	·314	·308	·302	·296	·289	·283	·277	·271	·265	·258	·252	·246	·240	·233	·227	·221	·215	·209
61	·333	·326	·320	·314	·308	·302	·295	·289	·283	·277	·271	·264	·258	·252	·246	·239	·233	·227
62	·351	·345	·339	·332	·326	·320	·314	·307	·301	·295	·289	·282	·276	·270	·264	·257	·251	·245
63	·371	·365	·358	·352	·346	·340	·333	·327	·321	·315	·308	·302	·296	·290	·283	·277	·271	·265
64	·392	·386	·379	·373	·367	·361	·354	·348	·342	·336	·329	·323	·317	·311	·304	·298	·292	·286
65	·413	·407	·400	·394	·388	·382	·375	·369	·363	·357	·350	·344	·338	·332	·325	·319	·313	·307
66	·431	·428	·422	·416	·409	·403	·397	·391	·384	·378	·372	·366	·359	·353	·347	·341	·334	·328
67	·457	·450	·444	·438	·432	·425	·419	·413	·407	·400	·394	·388	·382	·375	·369	·363	·357	·350
68	·480	·473	·467	·461	·455	·448	·442	·436	·430	·423	·417	·411	·405	·398	·392	·386	·380	·373
69	·503	·497	·491	·485	·478	·472	·466	·459	·453	·447	·441	·434	·428	·423	·416	·409	·403	·397
70	·528	·522	·515	·509	·503	·496	·490	·484	·478	·471	·465	·460	·453	·446	·440	·434	·427	·421
71	·553	·547	·540	·534	·528	·522	·515	·509	·503	·497	·490	·484	·478	·471	·465	·459	·453	·446
72	·579	·573	·566	·560	·554	·548	·541	·535	·529	·522	·516	·510	·504	·497	·491	·485	·478	·472
73	·606	·599	·593	·587	·581	·574	·568	·562	·555	·549	·543	·536	·530	·524	·518	·511	·505	·500
74	·633	·627	·621	·614	·608	·602	·595	·589	·583	·577	·570	·564	·558	·551	·545	·539	·533	·526
75	·662	·655	·649	·643	·636	·630	·624	·618	·611	·605	·599	·592	·586	·580	·573	·567	·561	·555
76	·691	·685	·678	·672	·666	·659	·653	·647	·640	·634	·628	·621	·615	·609	·603	·596	·590	·584
77	·721	·715	·708	·702	·696	·689	·683	·677	·670	·664	·658	·651	·645	·639	·633	·626	·620	·614
78	·752	·746	·739	·733	·727	·720	·714	·708	·701	·695	·689	·682	·676	·670	·663	·657	·651	·644
79	·784	·778	·771	·765	·759	·752	·746	·740	·733	·727	·721	·714	·708	·702	·696	·689	·683	·676
80	·817	·810	·804	·798	·791	·785	·779	·772	·766	·760	·753	·747	·741	·734	·728	·722	·715	·709
81	·850	·844	·838	·831	·825	·819	·812	·806	·800	·793	·787	·781	·774	·768	·762	·755	·749	·743
82	·885	·879	·873	·866	·860	·854	·847	·841	·835	·828	·822	·816	·809	·803	·796	·790	·784	·777

TABLE VI,

For finding the Tension of Vapour in the Air, in English inches, from the readings of the dry t and wet bulb t' thermometers, at the mean barometric pressure of 27.7 inches and in the latitude of 22°—(continued).

Wet bulb t' .	VALUES OF $t-t'$ IN DEGREES, FAHRENHEIT.																	
	25.5	26	26.5	27	27.5	28	28.5	29	29.5	30	30.5	31	31.5	32	32.5	33	33.5	34
48	.020	.014	.008	.002														
49	.033	.027	.021	.014	.008	.002												
50	.048	.042	.035	.029	.023	.017	.011	.005										
51	.061	.055	.049	.043	.036	.030	.024	.018	.012	.006								
52	.075	.069	.062	.056	.050	.044	.038	.032	.025	.019	.013	.007						
53	.089	.083	.077	.070	.064	.058	.052	.046	.040	.033	.027	.021	.015	.009	.003			
54	.104	.097	.091	.085	.079	.073	.067	.060	.054	.048	.042	.036	.029	.023	.017	.011	.005	
55	.119	.113	.106	.100	.094	.088	.082	.075	.069	.063	.057	.051	.045	.038	.032	.026	.020	
56	.134	.128	.122	.116	.110	.103	.097	.091	.085	.079	.072	.066	.060	.054	.048	.042	.035	
57	.151	.144	.138	.132	.126	.120	.113	.107	.101	.095	.089	.083	.076	.070	.064	.058	.052	
58	.167	.161	.155	.149	.143	.136	.130	.124	.118	.111	.105	.099	.093	.087	.080	.074	.068	
59	.185	.178	.172	.166	.160	.154	.147	.141	.135	.129	.122	.116	.110	.104	.098	.091	.085	
60	.202	.196	.190	.184	.178	.171	.165	.160	.153	.146	.140	.134	.128	.122	.115	.109	.103	
61	.221	.215	.208	.202	.196	.190	.183	.177	.171	.165	.159	.152	.146	.140	.134	.127	.121	
62	.239	.232	.226	.220	.214	.207	.201	.195	.189	.182	.176	.170	.164	.157	.151	.145	.139	
63	.258	.252	.246	.240	.233	.227	.221	.214	.208	.202	.196	.190	.183	.177	.171	.165	.158	
64	.280	.273	.267	.261	.255	.248	.242	.236	.230	.223	.217	.211	.205	.198	.192	.186	.180	
65	.300	.294	.288	.282	.275	.269	.263	.257	.250	.244	.238	.232	.225	.219	.213	.207	.200	
66	.322	.316	.309	.303	.297	.291	.284	.278	.272	.266	.259	.253	.247	.241	.235	.228	.222	
67	.344	.338	.332	.325	.319	.313	.307	.300	.294	.288	.282	.275	.269	.263	.257	.250	.244	
68	.367	.361	.354	.348	.342	.336	.329	.323	.317	.311	.304	.298	.292	.286	.279	.273	.267	
69	.391	.384	.378	.372	.366	.359	.353	.347	.340	.334	.328	.322	.315	.309	.303	.297	.290	
70	.415	.409	.402	.396	.390	.384	.377	.371	.365	.358	.352	.346	.340	.333	.327	.321	.315	
71	.440	.434	.427	.421	.415	.409	.402	.396	.390	.384	.377	.371	.365	.358	.352	.346	.340	
72	.466	.460	.453	.447	.441	.434	.428	.422	.416	.409	.403	.397	.390	.384	.378	.372	.366	
73	.492	.486	.480	.474	.467	.461	.455	.448	.442	.436	.430	.423	.417	.411	.404	.398	.392	
74	.520	.514	.507	.501	.495	.488	.482	.476	.470	.463	.457	.451	.444	.438	.432	.426	.419	
75	.548	.542	.536	.530	.523	.517	.510	.504	.498	.491	.485	.479	.473	.466	.460	.454	.447	
76	.577	.571	.565	.558	.552	.546	.539	.533	.527	.521	.514	.508	.502	.495	.489	.483	.476	
77	.607	.601	.595	.588	.582	.576	.569	.563	.557	.550	.544	.538	.532	.525	.519	.513	.506	
78	.638	.632	.626	.619	.613	.607	.600	.594	.588	.581	.575	.569	.562	.556	.550	.543	.537	
79	.670	.664	.657	.651	.645	.638	.632	.626	.619	.613	.607	.600	.594	.588	.581	.575	.569	
80	.703	.696	.690	.684	.677	.671	.665	.658	.652	.646	.639	.633	.627	.620	.614	.608	.601	
81	.736	.730	.724	.717	.711	.705	.698	.692	.686	.679	.673	.667	.660	.654	.648	.641	.635	
82	.771	.765	.758	.752	.746	.739	.733	.727	.720	.714	.708	.701	.695	.689	.682	.676	.670	

TABLE VI,

For finding the Tension of Vapour in the Air, in English inches, from the readings of the dry t and wet bulb t' thermometers, at the mean barometric pressure of 27.7 inches and in the latitude of 22°—(concluded).

Wet bulb t' .	VALUES OF $t-t'$ IN DEGREES, FAHRENHEIT.																
	34°5	35	35°5	36	36°5	37	37°5	38	38°5	39	39°5	40	40°5	41°	41°5	42	42°5
53																	
54																	
55	.007																
56	.023	.017	.011	.004													
57	.039	.033	.027	.021	.014	.008	.002										
58	.056	.049	.043	.037	.031	.025	.018	.012	.006								
59	.073	.067	.060	.054	.048	.042	.036	.029	.023	.017	.011	.005					
60	.091	.084	.078	.072	.066	.060	.053	.047	.041	.035	.028	.022	.016	.010	.004		
61	.109	.103	.096	.090	.084	.078	.072	.065	.059	.053	.047	.040	.034	.028	.022	.016	.009
62	.126	.120	.114	.107	.101	.095	.089	.082	.076	.070	.064	.057	.051	.045	.039	.032	.026
63	.146	.140	.133	.127	.121	.115	.108	.102	.096	.090	.083	.077	.071	.065	.058	.052	.046
64	.167	.161	.155	.149	.142	.136	.130	.124	.117	.111	.105	.099	.092	.086	.080	.074	.068
65	.188	.182	.176	.169	.163	.157	.151	.144	.138	.132	.126	.119	.113	.107	.101	.094	.088
66	.210	.203	.197	.191	.185	.178	.172	.166	.160	.153	.147	.141	.135	.128	.122	.116	.110
67	.232	.225	.219	.213	.207	.200	.194	.188	.182	.175	.169	.163	.157	.150	.144	.138	.132
68	.254	.248	.242	.236	.229	.223	.217	.211	.204	.198	.192	.186	.179	.173	.167	.160	.154
69	.278	.272	.265	.259	.253	.246	.240	.234	.228	.221	.215	.208	.203	.196	.190	.184	.178
70	.302	.296	.290	.283	.277	.271	.264	.258	.252	.246	.239	.233	.227	.221	.214	.208	.202
71	.327	.321	.314	.308	.302	.296	.289	.283	.277	.271	.264	.258	.252	.245	.239	.233	.227
72	.353	.346	.340	.334	.328	.321	.315	.309	.303	.296	.290	.284	.277	.271	.265	.259	.252
73	.379	.373	.367	.360	.354	.348	.342	.335	.329	.323	.316	.310	.304	.297	.291	.285	.279
74	.407	.400	.394	.388	.381	.375	.369	.363	.358	.350	.344	.337	.331	.325	.318	.312	.306
75	.435	.428	.422	.416	.410	.403	.397	.391	.384	.378	.372	.365	.359	.353	.347	.340	.334
76	.461	.457	.451	.445	.439	.432	.426	.420	.413	.407	.401	.394	.388	.382	.375	.369	.363
77	.494	.487	.481	.475	.468	.462	.456	.449	.443	.437	.430	.424	.418	.412	.405	.399	.393
78	.524	.518	.512	.506	.499	.493	.486	.480	.474	.468	.461	.455	.449	.442	.436	.430	.423
79	.556	.550	.544	.537	.531	.525	.518	.512	.506	.499	.493	.487	.480	.474	.468	.461	.455
80	.589	.582	.576	.570	.563	.557	.551	.544	.538	.532	.525	.519	.513	.506	.500	.494	.487
81	.622	.616	.610	.603	.597	.591	.584	.578	.572	.565	.559	.553	.546	.540	.534	.527	.521
82	.657	.651	.644	.638	.632	.626	.619	.613	.606	.600	.593	.587	.581	.574	.568	.562	.555

TABLE VII.

For finding the Relative Humidity of the Air, from the readings of the dry t and wet bulb t' thermometers, at the mean barometric pressure of 27.7 inches.

Wet bulb t' .	VALUES OF $t-t'$ IN DEGREES, FAHRENHEIT.														
	0	0.5	1	1.5	2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7
23	100	94	88	81	75	69	64	59	54	49	44	40	36	32	28
24	100	94	88	82	76	70	65	60	55	50	46	41	37	33	29
25	100	94	88	82	77	71	66	61	57	52	47	43	39	35	31
26	100	94	88	83	77	73	67	62	59	53	49	45	41	37	33
27	100	94	88	83	78	73	68	63	59	55	50	46	42	39	35
28	100	94	89	83	78	74	69	64	60	56	52	48	44	41	37
29	100	94	89	84	79	74	70	65	61	57	53	49	46	42	38
30	100	95	89	84	79	75	71	66	62	58	54	51	47	44	40
31	100	95	90	85	80	76	72	67	63	59	55	52	49	45	42
32	100	95	90	85	80	78	71	67	63	59	55	51	47	44	40
33	100	95	90	85	80	76	72	68	63	60	56	52	49	45	42
34	100	95	90	86	81	77	72	68	64	60	57	53	50	46	43
35	100	95	90	86	81	77	73	69	65	61	58	54	51	47	44
36	100	95	91	86	82	78	74	70	66	62	59	56	52	48	45
37	100	95	91	87	82	78	74	71	67	63	60	56	53	50	47
38	100	96	91	87	83	79	75	72	68	64	60	57	54	51	48
39	100	96	91	87	83	79	75	72	68	65	61	58	55	52	49
40	100	96	92	88	84	80	76	73	69	66	62	59	56	53	50
41	100	96	92	88	84	80	77	73	70	66	63	60	57	54	51
42	100	96	92	88	84	81	77	74	70	67	64	61	58	55	52
43	100	96	92	88	85	81	77	74	71	68	65	62	59	56	53
44	100	96	92	89	85	81	78	75	71	68	65	62	60	57	54
45	100	96	92	89	85	83	78	75	72	69	66	63	60	58	55
46	100	96	92	89	85	82	79	76	73	70	67	64	61	58	56
47	100	96	93	89	86	82	79	76	73	70	67	65	62	59	57
48	100	96	93	89	86	83	80	77	74	71	68	65	63	60	58
49	100	96	93	90	86	83	80	77	74	71	68	66	63	61	58
50	100	97	93	90	87	83	80	77	75	72	69	66	64	61	59
51	100	97	93	90	87	84	81	78	75	72	70	67	64	62	60
52	100	97	93	90	87	84	81	78	76	73	70	68	65	63	60

TABLE VII,

For finding the relative humidity of the air from the readings of the dry t and wet bulb t' thermometers, at the mean barometric pressure of 27.7 inches—(continued).

Wet bulb t' .	VALUES OF $t-t'$ IN DEGREES, FAHRENHEIT.																	
	7 5	8	8'5	9	9'5	10	10'5	11	11'5	12	12'5	13	13'5	14	14'5	15	15'5	16
23	24	20	16	13	10	7	4	1										
24	26	22	19	15	12	9	7	4	1									
25	28	24	21	18	15	12	9	6	3	1								
26	30	27	23	20	17	14	11	9	6	3	1							
27	32	28	25	22	19	16	14	11	8	6	3	1						
28	34	31	27	24	21	19	16	13	11	8	6	4	1					
29	35	32	29	26	23	21	18	15	13	11	8	6	4	2				
30	37	34	31	28	25	23	20	17	15	13	11	8	6	4	2			
31	39	36	33	30	27	25	22	20	17	15	13	11	9	7	5	3	1	
32	37	34	31	28	25	22	19	17	14	12	10	8	6	4				
33	38	35	32	29	26	24	21	19	16	14	12	10	8	6	4	2		
34	40	37	34	31	29	26	24	21	18	16	14	12	10	8	6	4	2	
35	41	38	35	33	30	27	25	23	20	18	16	14	12	10	8	6	4	2
36	43	40	37	34	32	29	27	24	22	20	18	16	14	12	10	8	6	4
37	44	42	39	36	33	31	28	26	24	22	20	18	16	13	12	10	8	6
38	45	42	40	37	35	33	30	28	25	23	21	19	17	15	13	11	10	8
39	46	44	41	39	36	33	31	29	27	24	23	21	19	17	15	13	11	10
40	47	45	42	40	37	35	33	31	28	26	24	22	20	18	17	15	13	11
41	48	46	44	41	39	36	34	32	30	28	26	24	22	20	18	16	15	13
42	49	47	45	42	40	37	35	33	31	29	27	25	23	21	19	18	16	15
43	50	48	46	43	41	38	36	34	32	30	28	26	24	23	21	19	18	16
44	51	49	47	44	42	40	38	35	33	31	30	28	26	24	22	21	19	18
45	52	50	48	45	43	41	39	37	35	33	31	29	27	25	24	22	21	19
46	53	51	49	46	44	42	40	38	36	34	32	30	28	27	25	24	22	21
47	54	52	50	47	45	43	41	39	37	35	33	31	30	28	27	25	24	22
48	55	53	51	48	46	44	42	40	38	36	34	33	31	29	28	26	25	23
49	56	54	51	49	47	45	43	41	39	37	35	34	32	30	29	27	26	24
50	57	55	53	51	49	47	45	43	41	39	37	35	33	32	30	29	27	26
51	57	55	53	51	49	47	45	43	41	39	37	36	34	33	31	30	29	27
52	58	56	54	51	50	48	46	44	42	40	38	37	35	34	32	31	29	28

TABLE VII,

For finding the relative humidity of the air from the readings of the dry t and wet bulb t' thermometers, at the mean barometric pressure of 27.7 inches—(continued).

Wet bulb t' .	VALUES OF $t-t'$ IN DEGREES, FAHRENHEIT.																	
	16.5	17	17.5	18	18.5	19	19.5	20	20.5	21	21.5	22	22.5	23	23.5	24	24.5	25
23																		
24																		
25																		
26																		
27																		
28																		
29																		
30																		
31																		
32																		
33																		
34																		
35	1																	
36	3	1																
37	5	8	1															
38	7	5	3	2														
39	8	7	5	4	2	1												
40	10	9	7	6	4	3	2	1										
41	12	10	9	7	6	5	3	2	1									
42	13	12	10	9	8	6	5	4	3	2	1							
43	15	13	12	11	9	8	7	6	4	3	2	1						
44	16	15	13	12	11	9	8	7	6	5	4	3	2	1				
45	18	16	15	14	12	11	10	9	8	7	5	4	3	2	1	1		
46	19	18	16	15	14	12	11	10	9	8	7	6	5	4	3	2	1	
47	21	19	18	16	15	14	13	11	10	9	8	7	6	5	4	3	2	
48	22	20	19	18	17	16	14	13	12	11	10	9	8	7	6	5	4	3
49	23	22	20	19	18	17	15	14	13	12	11	10	9	8	7	6	5	5
50	24	23	22	20	19	18	17	16	14	13	12	11	10	9	8	7	7	6
51	26	24	23	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7
52	27	25	24	23	21	20	19	18	17	16	15	14	13	12	11	10	9	9

TABLE VII,

For finding the relative humidity of the air from the readings of the dry t and wet bulb t' thermometers, at the mean barometric pressure of 27.7 inches—(continued).

Wet bulb t' .	VALUES OF $t-t'$ IN DEGREES, FAHRENHEIT.														
	0	0.5	1	1.5	2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7
53	100	97	93	90	87	84	81	79	76	73	71	68	66	64	61
54	100	97	94	91	88	85	82	79	76	74	71	69	66	64	62
55	100	97	94	91	88	85	82	79	77	74	72	69	67	65	62
56	100	97	94	91	88	85	82	80	77	75	72	70	67	65	63
57	100	97	94	91	88	85	83	80	78	75	73	70	68	66	64
58	100	97	94	91	88	86	83	80	78	76	73	71	68	66	64
59	100	97	94	91	89	86	83	81	78	76	73	71	69	67	65
60	100	97	94	91	89	86	83	81	79	76	74	72	69	67	65
61	100	97	94	92	89	86	84	81	79	77	74	72	70	68	66
62	100	97	94	92	89	86	84	81	79	77	75	73	71	68	66
63	100	97	94	92	89	87	84	82	79	77	75	73	71	69	67
64	100	97	95	92	89	87	84	82	80	78	75	73	71	69	67
65	100	97	95	92	90	87	85	82	80	78	76	74	71	69	68
66	100	97	95	92	90	87	85	83	80	78	76	74	71	70	68
67	100	97	95	92	90	87	85	83	81	79	76	74	72	70	68
68	100	98	95	92	90	88	85	83	81	79	77	75	73	71	69
69	100	98	95	93	90	88	86	83	81	79	77	75	73	71	69
70	100	98	95	93	90	88	86	84	82	80	78	76	74	72	70
71	100	98	95	93	90	88	86	84	82	80	78	76	74	72	70
72	100	98	95	93	90	88	86	84	82	80	78	76	74	72	70
73	100	98	95	93	91	88	86	84	82	80	78	76	74	72	71
74	100	98	95	93	91	89	86	84	82	80	78	76	75	73	71
75	100	98	95	93	91	89	87	85	83	81	79	77	75	73	71
76	110	98	95	93	91	89	87	85	83	81	79	77	75	73	72
77	100	98	95	93	91	89	87	85	83	81	79	77	75	74	72
78	100	98	95	93	91	89	87	85	83	81	79	78	76	74	72
79	100	98	95	93	91	89	87	85	83	81	80	78	76	74	73
80	100	98	95	93	91	89	87	85	83	82	80	78	76	75	73
81	100	98	95	93	91	89	87	85	84	82	80	78	77	75	73
82	100	98	95	93	92	90	88	86	84	82	80	79	77	75	74

TABLE VII.

For finding the relative humidity of the air from the readings of the dry and wet bulb thermometers, at the mean barometric pressure of 27.7 inches—(continued).

Wet bulb t' .	VALUES OF $t - t'$ IN DEGREES, FAHRENHEIT.																	
	7.5	8	8.5	9	9.5	10	10.5	11	11.5	12	12.5	13	13.5	14	14.5	15	15.5	16
53	59	57	55	52	50	49	47	45	43	41	39	38	36	35	33	32	30	29
54	59	57	55	53	51	49	47	46	44	42	40	39	37	36	34	33	32	30
55	60	58	56	54	52	50	48	46	45	43	41	40	38	37	35	34	32	31
56	61	59	57	55	53	51	49	47	46	44	42	41	39	38	36	35	33	32
57	61	59	57	55	54	52	50	48	46	45	43	41	40	38	37	36	34	33
58	62	60	58	56	54	52	51	49	47	45	44	42	41	39	38	37	35	34
59	63	61	59	57	55	53	51	50	48	46	45	43	42	40	39	37	36	35
60	63	61	59	57	55	54	52	50	49	47	45	44	43	41	39	38	37	36
61	64	62	60	58	56	54	53	51	49	48	46	45	43	42	40	39	38	36
62	64	62	60	58	56	55	53	52	50	48	47	45	44	42	41	40	38	37
63	65	63	61	59	57	56	54	52	50	49	48	46	44	43	42	41	39	38
64	65	63	61	60	58	56	54	52	51	50	48	47	45	44	43	41	40	39
65	66	64	62	60	58	57	55	53	52	50	49	47	46	45	44	42	41	39
66	66	64	62	61	59	57	55	53	52	51	49	48	47	45	44	43	41	40
67	67	65	63	61	59	58	56	55	53	52	50	49	47	46	45	43	42	41
68	67	65	63	62	60	58	56	55	54	52	51	49	48	47	46	44	43	42
69	68	66	64	62	60	59	57	56	54	53	51	50	49	47	46	45	44	42
70	68	66	64	63	61	59	58	56	55	53	52	50	49	48	47	45	44	43
71	69	66	65	63	61	60	58	57	55	54	52	51	50	48	47	46	45	43
72	69	67	65	63	62	60	59	57	56	54	53	52	50	49	48	46	44	41
73	69	67	66	64	62	61	59	58	56	55	53	52	51	49	48	47	46	45
74	69	68	66	64	63	61	60	58	57	55	54	53	52	50	49	47	46	45
75	70	68	67	65	63	62	60	59	57	56	54	53	52	51	49	48	47	46
76	70	68	67	65	64	62	61	59	58	56	55	54	53	51	50	49	47	46
77	70	69	67	65	64	62	61	60	58	57	55	54	53	52	50	49	48	47
78	71	69	68	66	64	63	61	60	58	57	56	55	54	52	51	50	49	47
79	71	69	68	66	65	63	62	60	59	58	56	55	54	53	51	50	49	48
80	71	70	68	66	65	64	62	61	59	58	57	55	54	53	52	51	50	49
81	72	70	69	67	65	64	63	61	60	58	57	56	55	53	52	51	50	49
82	72	70	69	67	66	64	63	62	60	59	57	56	55	54	53	52	51	49

TABLE VII,

For finding the relative humidity of the air from the readings of the dry t and wet bulb t' thermometers, at the mean barometric pressure of 27.7 inches—(continued).

Wet bulb t' .	VALUES OF $t-t'$ IN DEGREES, FAHRENHEIT.																	
	16.5	17	17.5	18	18.5	19	19.5	20	20.5	21	21.5	22	22.5	23	23.5	24	24.5	25
53	28	28	25	24	23	21	20	19	18	17	16	15	14	13	12	11	11	10
54	29	27	26	25	24	22	21	20	19	18	17	16	15	14	13	13	12	11
55	30	28	27	26	25	24	22	21	20	19	18	17	16	15	14	14	13	12
56	31	29	28	27	26	25	23	22	21	20	19	18	17	16	15	14	13	13
57	32	30	29	28	27	23	24	23	22	21	20	19	18	18	17	16	15	14
58	33	31	30	29	28	27	25	24	23	22	21	20	19	19	18	17	16	15
59	33	32	31	30	29	28	26	25	24	23	22	21	20	20	19	18	17	16
60	34	33	32	31	29	28	27	26	25	24	23	22	21	21	20	19	18	17
61	35	34	33	32	30	29	28	27	26	25	24	23	22	21	21	20	19	18
62	36	35	34	32	31	30	29	28	27	26	25	24	23	22	22	21	20	19
63	37	36	34	33	32	31	30	29	28	27	26	25	24	23	22	22	21	20
64	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	22	21
65	38	37	36	35	34	33	31	30	30	29	28	27	26	25	24	23	22	22
66	39	38	37	35	34	33	32	31	30	29	28	27	26	25	24	23	22	22
67	40	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	23
68	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	26	25	24
69	41	40	39	38	37	36	35	33	33	32	31	30	29	28	27	26	26	25
70	42	40	39	38	37	36	35	34	33	32	31	30	29	29	28	27	26	25
71	42	41	40	39	38	37	36	35	34	33	32	31	30	29	28	28	27	26
72	43	42	41	39	38	37	37	36	35	34	33	32	31	30	29	28	28	27
73	44	42	41	40	39	38	37	36	35	34	34	33	32	31	30	29	28	27
74	44	43	42	41	40	39	38	37	36	35	34	33	32	31	31	30	29	28
75	45	44	43	41	40	39	38	38	36	35	35	34	33	32	31	30	29	29
76	45	44	43	42	41	40	39	38	37	36	35	34	33	32	31	30	29	29
77	46	45	44	43	42	40	40	39	38	37	36	35	34	33	32	32	31	30
78	46	45	44	43	42	41	40	39	38	37	36	35	35	34	33	32	31	31
79	47	46	45	44	43	42	41	40	39	38	37	36	35	34	33	32	31	31
80	47	46	45	44	43	42	41	40	39	38	37	37	36	35	34	33	33	32
81	48	47	46	45	44	43	42	41	40	39	38	37	36	35	34	33	33	32
82	48	47	46	45	44	43	42	41	40	39	38	37	36	35	34	34	33	33

TABLE VII,

For finding the relative humidity of the air from the readings of the dry t and wet bulb t' thermometers, at the mean barometric pressure of 27.7 inches—(continued).

Wet bulb t' .	VALUES OF $t-t'$ IN DEGREES, FAHRENHEIT.																
	25.5	26	26.5	27	27.5	28	28.5	29	29.5	30	30.5	31	31.5	32	32.5	33	33.5
48	3	2	1														
49	4	3	2	2	1												
50	5	4	3	3	2	2	1	1									
51	6	5	4	4	3	3	2	2	1	1							
52	8	7	7	6	5	4	4	3	3	2	2	1					
53	9	8	8	7	6	5	5	4	4	3	3	2	2	1	1		
54	10	9	9	8	7	6	6	5	5	4	4	3	3	2	2	1	1
55	11	10	10	9	8	8	7	6	6	5	5	4	4	3	3	2	2
56	12	12	11	10	10	9	8	7	7	6	6	5	5	4	4	3	3
57	13	13	12	11	11	10	9	8	8	7	7	6	6	5	5	4	3
58	14	14	13	12	12	11	10	10	9	8	8	7	7	6	6	5	4
59	15	15	14	13	13	12	11	11	10	9	9	8	8	7	7	6	5
60	17	16	16	14	14	13	12	12	11	10	10	9	9	8	8	7	6
61	17	17	16	15	14	14	13	12	12	11	11	10	10	9	8	8	7
62	18	17	17	16	15	15	14	13	13	12	11	11	10	10	9	8	8
63	19	18	17	17	16	16	15	14	14	13	12	12	11	11	10	10	9
64	20	19	18	18	17	16	16	15	15	14	13	13	12	12	11	10	9
65	21	20	19	19	18	17	16	16	15	15	14	13	13	12	12	11	10
66	22	21	20	19	19	18	17	17	16	16	15	14	14	13	12	12	11
67	22	22	21	20	19	19	18	18	17	16	16	15	14	14	13	12	12
68	23	22	22	21	20	20	19	18	18	17	16	16	15	15	14	13	13
69	24	23	22	22	21	20	20	19	18	18	17	17	16	16	15	14	13
70	25	24	23	22	22	21	20	20	19	19	18	17	17	16	16	15	14
71	25	25	24	23	22	22	21	21	20	19	19	18	17	17	16	16	15
72	26	25	25	24	23	23	22	21	21	20	19	19	18	18	17	17	16
73	27	26	25	25	24	23	23	22	21	21	20	19	19	18	18	17	16
74	27	27	26	25	25	24	23	23	22	21	21	20	19	19	18	17	17
75	28	27	27	26	25	25	24	23	23	22	21	21	20	20	19	18	17
76	29	28	27	27	26	25	25	24	23	23	22	21	21	20	20	19	18
77	29	29	28	27	26	26	25	25	24	23	23	22	21	21	20	19	19
78	30	29	28	28	27	26	26	25	24	24	23	23	22	22	21	20	19
79	30	30	29	28	28	27	26	26	25	24	24	23	23	22	22	21	20
80	31	30	30	29	28	28	27	26	26	25	24	24	23	23	22	21	21
81	31	31	30	29	29	28	27	27	26	26	25	24	24	23	23	22	21
82	32	31	31	30	29	29	28	27	27	26	26	25	24	24	23	22	22

TABLE VII,

For finding the relative humidity of the air from the readings of the dry t and wet bulb t' thermometers, at the mean barometric pressure of 27.7 inches—(concluded).

Wet bulb t' .	VALUES OF $t-t'$ IN DEGREES, FAHRENHEIT.																
	34.5	35	35.5	36	36.5	37	37.5	38	38.5	39	39.5	40	40.5	41	41.5	42	42.5
53																	
54																	
55	1																
56	2	1	1														
57	3	2	2	1	1												
58	4	3	3	2	2	1	1	1									
59	5	4	4	3	3	2	2	2	1	1							
60	6	5	5	4	4	3	3	3	2	2	2	1	1	1	1	1	1
61	7	6	6	5	5	4	4	3	3	3	2	2	2	1	1	1	1
62	7	7	6	6	6	5	5	4	4	3	3	3	2	2	1	1	1
63	8	8	7	7	6	6	6	5	5	4	4	4	3	3	3	2	2
64	9	9	8	8	7	7	7	6	6	5	5	5	4	4	3	3	3
65	10	9	9	9	8	8	7	7	7	6	6	5	5	4	4	4	4
66	11	10	10	9	9	8	8	8	7	7	7	6	6	5	5	5	4
67	11	11	10	10	10	9	9	8	8	8	7	7	6	6	6	6	5
68	12	12	11	11	11	10	10	9	9	8	8	8	7	7	7	6	6
69	13	12	12	12	11	11	10	10	9	9	9	8	8	7	7	7	7
70	14	13	13	12	12	11	11	10	10	10	9	9	8	8	8	8	7
71	14	14	13	13	12	12	12	11	11	10	10	10	9	9	9	8	8
72	15	15	14	14	13	13	12	12	11	11	11	10	10	9	9	9	9
73	16	15	15	14	14	13	13	13	12	12	11	11	11	10	10	10	9
74	16	16	15	15	14	14	14	13	13	12	12	12	11	11	11	10	10
75	17	16	16	16	15	15	14	14	13	13	13	12	12	12	11	11	11
76	18	17	17	16	16	15	15	14	14	14	13	13	12	12	12	11	11
77	18	18	17	17	16	16	15	15	14	14	14	13	13	12	12	12	12
78	19	18	18	17	17	17	16	16	15	15	14	14	14	13	13	13	12
79	19	19	18	18	18	17	17	16	16	15	15	15	14	14	13	13	13
80	20	20	19	19	18	18	17	17	16	16	16	16	15	15	14	14	13
81	21	20	20	19	19	18	18	17	17	16	16	16	15	15	14	14	14
82	21	21	20	20	19	19	18	18	17	17	17	16	16	15	15	15	14

TABLE VIII,

For finding the Tension of Vapour in the Air, in English inches, from the readings of the dry t and wet bulb t' thermometers, at the mean barometric pressure of 25.8 inches and in the latitude of 22°.

Wet bulb t'	VALUES OF $t-t'$ IN DEGREES, FAHRENHEIT.														
	0	0.5	1	1.5	2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7
23	.123	.118	.113	.107	.102	.091	.082	.087	.082	.077	.072	.067	.062	.057	.051
24	.128	.123	.118	.113	.108	.103	.098	.093	.087	.082	.077	.072	.067	.062	.057
25	.134	.120	.124	.119	.114	.108	.103	.098	.093	.088	.083	.078	.073	.068	.063
26	.140	.135	.130	.125	.120	.114	.109	.104	.099	.094	.089	.084	.079	.074	.069
27	.146	.141	.136	.131	.126	.121	.116	.110	.105	.100	.095	.090	.085	.080	.075
28	.153	.148	.142	.137	.132	.127	.122	.117	.112	.107	.102	.096	.091	.086	.081
29	.159	.154	.149	.144	.139	.134	.129	.124	.119	.113	.108	.103	.098	.093	.088
30	.167	.161	.156	.151	.146	.141	.136	.131	.126	.120	.115	.110	.105	.100	.095
31	.174	.169	.164	.158	.153	.148	.143	.138	.133	.128	.123	.118	.112	.107	.102
32	.182	.176	.170	.165	.159	.153	.148	.142	.136	.131	.125	.120	.114	.108	.103
33	.189	.183	.178	.172	.166	.161	.155	.149	.144	.138	.132	.127	.121	.116	.110
34	.197	.191	.185	.180	.174	.168	.163	.157	.151	.146	.140	.134	.129	.123	.117
35	.204	.199	.193	.187	.182	.176	.171	.165	.159	.154	.148	.142	.137	.131	.125
36	.213	.207	.201	.196	.190	.184	.179	.173	.167	.162	.156	.150	.145	.139	.133
37	.221	.215	.210	.204	.198	.193	.187	.181	.175	.170	.164	.159	.153	.147	.142
38	.230	.224	.218	.213	.207	.201	.196	.190	.184	.178	.173	.167	.162	.156	.150
39	.239	.233	.227	.222	.216	.210	.205	.199	.193	.188	.182	.176	.171	.165	.159
40	.248	.243	.237	.231	.226	.220	.214	.208	.203	.197	.191	.186	.180	.174	.169
41	.258	.252	.247	.241	.235	.229	.224	.218	.212	.207	.201	.195	.190	.184	.178
42	.268	.262	.257	.251	.245	.240	.234	.228	.222	.217	.211	.205	.200	.194	.188
43	.278	.273	.267	.261	.256	.250	.244	.238	.233	.227	.221	.216	.210	.204	.199
44	.289	.283	.278	.272	.266	.261	.255	.249	.243	.238	.232	.226	.221	.215	.209
45	.300	.295	.289	.283	.278	.272	.266	.260	.255	.249	.243	.238	.232	.226	.221
46	.312	.306	.300	.295	.289	.283	.277	.272	.266	.260	.255	.249	.243	.237	.232
47	.324	.318	.312	.306	.301	.295	.289	.283	.278	.272	.266	.261	.255	.249	.244
48	.336	.330	.324	.319	.313	.307	.302	.296	.290	.284	.279	.273	.267	.262	.256
49	.348	.343	.337	.331	.326	.320	.314	.309	.303	.297	.291	.286	.280	.274	.268
50	.362	.356	.350	.345	.339	.333	.327	.322	.316	.310	.304	.299	.293	.287	.282
51	.375	.370	.364	.358	.352	.347	.341	.335	.329	.324	.318	.312	.306	.301	.295
52	.389	.384	.378	.372	.366	.361	.355	.349	.343	.338	.332	.326	.320	.315	.309

TABLE VIII.

For finding the Tension of Vapour in the Air, in English inches, from the readings of the dry t and wet bulb t' thermometers, at the mean barometric pressure of 25.8 inches in the latitude of 22°—(continued).

Wet bulb t' .	VALUES OF $t - t'$ IN DEGREES, FAHRENHEIT.																	
	7.5	8	8.5	9	9.5	10	10.5	11	11.5	12	12.5	13	13.5	14	14.5	15	15.5	16
23	.046	.041	.036	.031	.026	.021	.016	.011	.006	.001								
24	.052	.047	.042	.037	.031	.026	.021	.016	.011	.006	.001							
25	.057	.052	.047	.042	.037	.032	.027	.022	.017	.012	.007	.001						
26	.063	.058	.053	.048	.043	.038	.033	.028	.023	.018	.012	.007	.002					
27	.070	.064	.059	.054	.049	.044	.039	.034	.029	.024	.019	.013	.008	.003				
28	.076	.071	.066	.061	.056	.051	.045	.040	.035	.030	.025	.020	.015	.010	.005			
29	.083	.078	.072	.067	.062	.057	.052	.047	.042	.037	.032	.026	.021	.016	.011	.006	.001	
30	.090	.085	.080	.074	.069	.064	.059	.054	.049	.044	.039	.033	.028	.023	.018	.013	.008	.003
31	.097	.092	.087	.082	.077	.071	.066	.061	.056	.051	.046	.041	.036	.030	.025	.020	.015	.010
32	.097	.091	.086	.080	.074	.069	.063	.058	.052	.046	.041	.035	.029	.024	.018	.012	.007	.001
33	.104	.099	.093	.087	.082	.076	.070	.065	.059	.053	.048	.042	.036	.031	.025	.020	.014	.008
34	.112	.106	.100	.095	.089	.084	.078	.072	.067	.061	.055	.050	.044	.038	.033	.027	.021	.016
35	.120	.114	.108	.103	.097	.091	.086	.080	.074	.069	.063	.057	.052	.046	.040	.035	.029	.023
36	.128	.122	.116	.111	.106	.099	.094	.088	.082	.077	.071	.065	.060	.054	.048	.043	.037	.031
37	.136	.130	.125	.119	.113	.108	.102	.096	.091	.085	.079	.074	.068	.062	.057	.051	.045	.040
38	.145	.139	.133	.128	.122	.116	.111	.105	.099	.094	.088	.082	.077	.071	.065	.060	.054	.048
39	.154	.148	.142	.137	.131	.125	.120	.114	.108	.103	.097	.091	.086	.080	.074	.069	.063	.057
40	.163	.157	.152	.146	.140	.135	.129	.123	.118	.112	.106	.101	.095	.089	.083	.078	.072	.066
41	.173	.167	.161	.156	.150	.144	.138	.133	.127	.121	.116	.110	.104	.099	.093	.087	.082	.076
42	.183	.177	.171	.166	.160	.154	.148	.143	.137	.131	.126	.120	.114	.109	.103	.097	.092	.086
43	.193	.187	.182	.176	.170	.164	.159	.153	.147	.142	.136	.130	.125	.119	.113	.107	.102	.096
44	.204	.198	.192	.186	.181	.175	.169	.164	.158	.152	.147	.141	.135	.129	.124	.118	.112	.107
45	.215	.209	.203	.198	.192	.186	.180	.175	.169	.163	.158	.152	.146	.141	.135	.129	.123	.118
46	.226	.220	.215	.200	.203	.197	.192	.186	.180	.175	.169	.163	.158	.152	.146	.140	.135	.129
47	.238	.232	.226	.221	.215	.209	.204	.198	.192	.186	.181	.175	.169	.163	.158	.152	.146	.141
48	.250	.244	.239	.233	.227	.221	.216	.210	.204	.199	.193	.187	.181	.176	.170	.164	.159	.153
49	.263	.257	.251	.246	.240	.234	.238	.233	.217	.211	.205	.200	.194	.188	.183	.177	.171	.165
50	.276	.270	.264	.259	.253	.247	.241	.236	.230	.224	.218	.213	.207	.201	.196	.190	.184	.178
51	.289	.284	.278	.272	.266	.261	.255	.249	.243	.238	.232	.226	.220	.215	.209	.203	.197	.192
52	.303	.297	.292	.286	.280	.275	.269	.263	.257	.252	.246	.240	.234	.229	.223	.217	.211	.206

TABLE VIII,

For finding the Tension of Vapour in the Air, in English inches, from the readings of the dry t and wet bulb t' thermometers, at the mean barometric pressure of 25.8 inches and in the latitude of 22°—(continued).

Wet bulb t' .	VALUES OF $t-t'$ IN DEGREES, FARRENHEIT.																
	16.5	17	17.5	18	18.5	19	19.5	20	20.5	21	21.5	22	22.5	23	23.5	24	24.5
23																	
24																	
25																	
26																	
27																	
28																	
29																	
30																	
31	·005																
32																	
33	·003																
34	·010	·004															
35	·018	·012	·007														
36	·026	·020	·014	·009	·003												
37	·034	·028	·023	·017	·011	·006											
38	·043	·037	·031	·026	·020	·014	·009	·003									
39	·052	·046	·040	·035	·029	·023	·017	·012	·006								
40	·061	·055	·049	·044	·038	·032	·027	·021	·015	·010	·004						
41	·070	·065	·059	·053	·048	·042	·036	·030	·025	·019	·013	·008	·002				
42	·080	·075	·069	·063	·057	·052	·046	·040	·035	·029	·023	·018	·012	·006			
43	·090	·085	·079	·073	·068	·062	·056	·050	·045	·039	·033	·028	·022	·016	·011	·005	
44	·101	·095	·090	·084	·078	·072	·067	·061	·055	·050	·044	·038	·032	·027	·021	·015	·010
45	·112	·106	·101	·095	·089	·084	·078	·072	·066	·061	·055	·049	·044	·038	·032	·026	·021
46	·123	·118	2	·106	·100	·095	·089	·083	·078	·072	·066	·060	·055	·049	·043	·038	·032
47	·135	·129	·123	·118	·112	·106	·101	·095	·089	·083	·078	·072	·066	·061	·055	·049	·043
48	·147	·141	·136	·130	·124	·118	·113	·107	·101	·096	·090	·084	·078	·073	·067	·061	·055
49	·160	·154	·148	·142	·137	·131	·125	·120	·114	·108	·102	·097	·091	·085	·079	·074	·068
50	·173	·167	·161	·155	·150	·144	·138	·132	·127	·121	·115	·110	·104	·098	·092	·087	·081
51	·186	·180	·174	·169	·163	·157	·152	·146	·140	·134	·129	·123	·117	·111	·106	·100	·094
52	·200	·194	·188	·183	·177	·171	·165	·160	·154	·148	·142	·137	·131	·125	·119	·114	·108

TABLE VIII,

For finding the Tension of Vapour in the Air, in English inches, from the readings of the dry t and wet bulb t' thermometers, at the mean barometric pressure of 25.8 inches and in the latitude of 22°—(continued).

Wet bulb t' .	VALUES OF $t-t'$ IN DEGREES, FAHRENHEIT.																
	25.5	26	26.5	27	27.5	28	28.5	29	29.5	30	30.5	31	31.5	32	32.5	33	33.5
23																	
24																	
25																	
26																	
27																	
28																	
29																	
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36																	
37																	
38																	
39																	
40																	
41																	
42																	
43																	
44																	
45	.009	.004															
46	.020	.015	.009	.003													
47	.032	.026	.021	.015	.009	.003											
48	.044	.038	.033	.027	.021	.015	.010	.004									
49	.057	.051	.046	.039	.034	.028	.022	.016	.011	.006							
50	.069	.064	.058	.052	.046	.041	.035	.029	.024	.018	.012	.006	.001				
51	.083	.077	.071	.065	.060	.054	.048	.042	.037	.031	.025	.020	.014	.008	.002		
52	.096	.091	.085	.079	.073	.068	.062	.056	.050	.045	.039	.033	.027	.022	.016	.010	.005

TABLE VIII,

For finding the Tension of Vapour in the Air, in English inches, from the readings of the dry t and wet bulb t' thermometers, at the mean barometric pressure of 25.8 inches and in the latitude of 22°—(continued).

Wet bulb t' .	VALUES OF $t - t'$ IN DEGREES, FAHRENHEIT.														
	0	0.5	1	1.5	2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7
53	·404	·398	·392	·387	·381	·375	·369	·364	·358	·352	·346	·341	·335	·329	·323
54	·410	·413	·407	·401	·396	·390	·384	·378	·373	·367	·361	·355	·350	·344	·338
55	·431	·428	·423	·417	·411	·405	·400	·394	·388	·382	·377	·371	·365	·359	·354
56	·450	·444	·439	·433	·427	·421	·416	·410	·404	·398	·392	·387	·381	·375	·369
57	·467	·461	·455	·449	·444	·438	·432	·426	·421	·415	·409	·403	·397	·392	·386
58	·481	·478	·472	·466	·461	·455	·449	·443	·437	·432	·426	·420	·414	·409	·403
59	·501	·495	·490	·484	·478	·472	·466	·461	·455	·449	·443	·438	·432	·426	·420
60	·519	·514	·508	·502	·496	·490	·485	·479	·473	·467	·461	·456	·450	·444	·438
61	·539	·532	·526	·521	·515	·509	·503	·497	·492	·486	·480	·474	·468	·463	·57
62	·557	·551	·546	·540	·534	·528	·522	·517	·511	·505	·500	·493	·488	·482	·476
63	·577	·571	·566	·560	·554	·548	·542	·537	·531	·525	·519	·513	·508	·502	·496
64	·598	·592	·586	·580	·574	·569	·563	·557	·551	·545	·540	·534	·528	·522	·516
65	·619	·613	·607	·601	·596	·590	·584	·578	·572	·566	·561	·555	·549	·543	·537
66	·641	·635	·629	·623	·617	·612	·606	·600	·594	·588	·582	·577	·571	·565	·559
67	·663	·657	·651	·646	·640	·634	·628	·622	·617	·611	·605	·599	·593	·587	·582
68	·686	·680	·675	·669	·663	·657	·651	·645	·640	·634	·628	·622	·616	·611	·605
69	·710	·704	·699	·693	·687	·681	·675	·669	·663	·658	·652	·646	·640	·634	·628
70	·735	·729	·723	·717	·711	·706	·700	·694	·688	·682	·676	·671	·665	·659	·653
71	·760	·754	·749	·743	·737	·731	·725	·719	·713	·708	·702	·696	·690	·684	·678
72	·786	·781	·775	·769	·763	·757	·751	·745	·740	·734	·728	·722	·716	·710	·704
73	·813	·807	·802	·796	·790	·784	·778	·772	·766	·761	·755	·749	·743	·737	·731
74	·811	·805	·809	·803	·808	·802	·806	·800	·794	·788	·782	·777	·771	·765	·759
75	·870	·864	·858	·852	·846	·840	·834	·829	·823	·817	·811	·805	·799	·793	·787
76	·889	·883	·887	·881	·876	·870	·864	·858	·852	·846	·840	·834	·829	·823	·817
77	·929	·923	·918	·912	·906	·900	·894	·888	·882	·876	·870	·865	·859	·853	·847
78	·960	·955	·949	·943	·937	·931	·925	·919	·913	·908	·902	·896	·890	·884	·878
79	·993	·987	·981	·975	·969	·963	·957	·951	·946	·940	·934	·928	·922	·916	·910
80	1·026	1·020	1·014	1·008	1·002	·996	·990	·984	·978	·973	·967	·961	·955	·949	·943
81	1·080	1·054	1·018	1·042	1·036	1·030	1·024	1·018	1·012	1·007	1·001	·995	·989	·983	·977
82	1·095	1·089	1·083	1·077	1·071	1·065	1·059	1·053	1·047	1·041	1·036	1·030	1·024	1·018	1·012

TABLE VIII,

For finding the Tension of Vapour in the Air, in English inches, from the readings of the dry t and wet bulb t' thermometers, at the mean barometric pressure of 25.8 inches and in the latitude of 22°—(continued).

Wet bulb t' .	VALUES OF $t-t'$ IN DEGREES, FAHRENHEIT.																	
	7.5	8	8.5	9	9.5	10	10.5	11	11.5	12	12.5	13	13.5	14	14.5	15	15.5	16
53	318	312	306	300	295	289	283	277	272	266	260	254	249	243	237	231	226	220
54	332	327	321	315	309	304	298	292	286	281	275	269	263	258	252	246	240	235
55	348	342	336	331	325	319	313	307	302	296	290	284	279	273	267	261	256	250
56	364	358	352	346	341	335	329	323	318	312	306	300	294	289	283	277	271	266
57	380	374	368	363	357	351	345	340	334	328	322	317	311	305	299	294	288	282
58	397	391	385	380	374	368	362	357	351	345	339	333	328	322	316	310	305	299
59	414	409	403	397	391	386	380	374	368	362	357	351	345	339	334	328	322	316
60	433	427	421	415	409	404	398	392	386	380	375	369	363	357	352	346	340	334
61	451	445	440	434	428	422	416	411	405	399	393	387	382	376	370	364	358	353
62	470	464	459	453	447	441	435	430	424	418	412	406	401	395	389	383	378	372
63	490	484	479	473	467	461	455	450	444	438	432	426	421	415	409	403	397	391
64	511	505	499	493	487	481	476	470	464	458	452	447	441	435	429	423	418	412
65	532	526	520	514	508	503	497	491	485	479	473	468	462	456	450	444	439	433
66	553	548	542	536	530	524	518	513	507	501	495	489	484	478	472	466	460	454
67	576	570	564	558	552	547	541	535	529	523	518	512	506	500	494	488	483	477
68	599	593	587	581	576	570	564	558	553	546	541	535	529	523	517	511	506	500
69	623	617	611	605	599	593	588	582	576	570	564	558	553	547	541	535	529	523
70	647	641	636	630	624	618	612	606	600	595	589	583	577	571	565	560	554	548
71	673	667	661	655	649	643	637	632	626	620	614	608	602	597	591	585	579	573
72	699	693	687	681	675	669	663	658	652	646	640	634	628	623	617	611	605	599
73	725	720	714	708	702	696	690	684	679	673	667	661	655	649	643	638	632	626
74	753	747	741	736	730	724	718	712	706	700	694	689	683	677	671	665	659	653
75	782	776	770	764	758	752	746	741	735	729	723	717	711	705	699	694	688	682
76	811	805	799	793	787	782	776	770	764	758	752	746	740	735	729	723	717	711
77	841	835	829	823	818	812	806	800	794	788	782	776	771	765	759	753	747	741
78	872	866	860	855	849	843	837	831	825	819	813	807	802	796	790	784	778	772
79	904	898	893	887	881	875	869	863	857	851	845	839	834	828	822	816	810	804
80	937	931	926	919	914	908	902	896	890	884	878	872	866	861	855	849	843	837
81	971	965	959	953	948	942	936	930	924	918	912	906	900	894	888	883	877	871
82	1'008	1'000	994	988	982	977	971	965	959	953	947	941	935	929	923	917	912	908

TABLE VIII.

For finding the Tension of Vapour in the Air, in English inches, from the readings of the dry t and wet bulb t' thermometers, at the mean barometric pressure of 25.8 inches and in the latitude of 22°—(continued).

Wet bulb t' .	VALUES OF $t - t'$ IN DEGREES, FAHRENHEIT.																		
	16.5	17	17.5	18	18.5	19	19.5	20	20.5	21	21.5	22	22.5	23	23.5	24	24.5	25	
53	'214	'208	'203	'197	'191	'185	'180	'174	'168	'162	'157	'151	'145	'139	'134	'128	'122	'116	
54	'229	'223	'217	'212	'206	'200	'194	'189	'183	'177	'171	'166	'160	'154	'148	'143	'137	'131	
55	'244	'238	'233	'227	'221	'215	'210	'204	'198	'192	'187	'181	'175	'169	'163	'158	'152	'146	
56	'260	'254	'248	'243	'237	'231	'225	'220	'214	'208	'202	'196	'191	'185	'179	'173	'168	'162	
57	'276	'270	'265	'259	'253	'247	'242	'236	'230	'224	'219	'213	'207	'201	'195	'190	'184	'178	
58	'293	'287	'281	'276	'270	'264	'258	'253	'247	'241	'235	'229	'224	'218	'212	'206	'201	'195	
59	'310	'305	'299	'293	'287	'281	'276	'270	'264	'258	'253	'247	'241	'235	'229	'224	'218	'212	
60	'328	'323	'317	'311	'305	'299	'294	'288	'282	'276	'270	'265	'259	'253	'247	'242	'236	'230	
61	'347	'341	'335	'329	'324	'318	'312	'306	'300	'295	'289	'283	'277	'272	'266	'260	'254	'248	
62	'366	'360	'354	'349	'343	'337	'331	'325	'320	'314	'308	'302	'296	'291	'285	'279	'273	'267	
63	'386	'380	'374	'368	'362	'357	'351	'345	'339	'333	'328	'322	'316	'310	'304	'299	'293	'287	
64	'406	'400	'394	'389	'383	'377	'371	'365	'359	'354	'348	'342	'336	'330	'325	'319	'313	'307	
65	'427	'421	'415	'410	'404	'398	'392	'386	'380	'375	'369	'363	'357	'351	'346	'340	'334	'328	
66	'449	'443	'437	'431	'425	'420	'414	'408	'402	'396	'390	'385	'379	'373	'367	'361	'356	'350	
67	'471	'465	'459	'453	'448	'442	'436	'430	'424	'418	'413	'407	'401	'395	'389	'384	'378	'372	
68	'494	'488	'482	'476	'471	'465	'459	'453	'447	'441	'436	'430	'424	'418	'412	'406	'401	'395	
69	'518	'512	'506	'500	'494	'488	'483	'477	'471	'465	'469	'453	'448	'442	'436	'430	'424	'418	
70	'542	'536	'530	'525	'519	'513	'507	'501	'495	'490	'484	'478	'472	'466	'460	'454	'449	'443	
71	'567	'561	'556	'550	'544	'538	'532	'526	'520	'515	'509	'503	'497	'491	'485	'480	'474	'468	
72	'593	'587	'582	'576	'570	'564	'558	'552	'546	'541	'535	'529	'523	'517	'511	'505	'500	'494	
73	'620	'614	'608	'602	'597	'591	'585	'579	'573	'567	'561	'556	'550	'544	'538	'532	'526	'520	
74	'648	'642	'636	'630	'624	'618	'612	'607	'601	'595	'589	'583	'577	'571	'565	'560	'554	'548	
75	'676	'670	'664	'658	'652	'647	'641	'635	'629	'623	'617	'611	'606	'600	'594	'588	'582	'576	
76	'705	'699	'693	'688	'682	'676	'670	'664	'658	'652	'646	'641	'635	'629	'623	'617	'611	'605	
77	'735	'729	'723	'718	'712	'706	'700	'694	'688	'682	'676	'671	'665	'669	'653	'647	'641	'635	
78	'766	'760	'754	'749	'743	'737	'731	'725	'719	'713	'707	'702	'696	'690	'684	'678	'672	'666	
79	'798	'792	'786	'781	'775	'769	'763	'757	'751	'745	'739	'733	'728	'722	'716	'710	'704	'698	
80	'831	'825	'819	'813	'807	'802	'796	'790	'784	'778	'772	'766	'760	'754	'749	'743	'737	'731	
81	'865	'859	'853	'847	'841	'835	'829	'824	'818	'812	'806	'800	'794	'788	'782	'776	'770	'765	
82	'900	'894	'888	'882	'876	'870	'864	'858	'852	'847	'841	'835	'829	'823	'817	'811	'805	'799	

TABLE VIII,

For finding the Tension of Vapour in the Air, in English inches, from the readings of the dry t and wet bulb t' thermometers, at the mean barometric pressure of 25.8 inches and in the latitude of 22°—(concluded).

Wet bulb t' .	VALUES OF $t - t'$ IN DEGREES, FAHRENHEIT.																	
	25.5	26	26.5	27	27.5	28	28.5	29	29.5	30	30.5	31	31.5	32	32.5	33	33.5	34
53	.111	.105	.099	.093	.088	.082	.076	.070	.065	.059	.053	.047	.042	.036	.030	.024	.019	.013
54	.125	.119	.114	.108	.102	.096	.091	.085	.079	.073	.068	.062	.056	.050	.045	.039	.033	.027
55	.140	.135	.129	.123	.117	.112	.108	.100	.094	.089	.083	.077	.071	.066	.060	.054	.048	.043
56	.156	.150	.145	.139	.133	.127	.122	.116	.110	.104	.098	.093	.087	.081	.075	.070	.064	.058
57	.172	.167	.161	.155	.149	.144	.138	.132	.126	.120	.115	.109	.103	.097	.092	.086	.080	.074
58	.189	.183	.177	.172	.166	.160	.154	.149	.143	.137	.131	.126	.120	.114	.108	.102	.097	.091
59	.206	.201	.195	.189	.183	.177	.172	.166	.160	.154	.149	.143	.137	.131	.125	.120	.114	.108
60	.224	.218	.213	.207	.201	.195	.189	.184	.178	.172	.166	.161	.155	.149	.143	.137	.132	.126
61	.243	.237	.231	.225	.219	.214	.208	.202	.196	.190	.185	.179	.173	.167	.161	.156	.150	.144
62	.262	.256	.250	.244	.238	.233	.227	.221	.215	.209	.204	.198	.192	.186	.180	.175	.169	.163
63	.281	.275	.270	.264	.258	.252	.246	.241	.235	.229	.223	.217	.212	.206	.200	.194	.188	.183
64	.301	.296	.290	.284	.278	.272	.267	.261	.255	.249	.243	.238	.232	.226	.220	.214	.208	.203
65	.322	.316	.311	.305	.299	.293	.287	.282	.276	.270	.264	.258	.253	.247	.241	.235	.229	.223
66	.344	.338	.332	.326	.321	.315	.309	.303	.297	.292	.286	.280	.274	.268	.262	.257	.251	.245
67	.366	.360	.354	.349	.343	.337	.331	.325	.319	.314	.308	.302	.296	.290	.285	.279	.273	.267
68	.389	.383	.377	.371	.366	.360	.354	.348	.342	.336	.331	.325	.319	.313	.307	.301	.296	.290
69	.413	.407	.401	.395	.389	.383	.378	.372	.366	.360	.354	.348	.343	.337	.331	.325	.319	.313
70	.437	.431	.425	.419	.414	.408	.402	.396	.390	.384	.379	.373	.367	.361	.355	.349	.343	.338
71	.462	.456	.450	.444	.439	.433	.427	.421	.415	.409	.404	.398	.392	.386	.380	.374	.368	.363
72	.488	.482	.476	.470	.464	.459	.453	.447	.441	.435	.429	.424	.418	.412	.406	.400	.394	.388
73	.515	.509	.503	.497	.492	.486	.479	.474	.468	.462	.456	.450	.444	.438	.432	.427	.421	.415
74	.542	.536	.530	.524	.519	.513	.507	.501	.495	.489	.483	.478	.472	.466	.460	.454	.448	.442
75	.570	.564	.559	.553	.547	.541	.535	.529	.523	.517	.512	.506	.500	.494	.488	.482	.476	.471
76	.599	.594	.588	.582	.576	.570	.564	.558	.552	.547	.541	.535	.529	.523	.517	.511	.505	.500
77	.629	.624	.618	.612	.606	.600	.594	.588	.582	.576	.571	.565	.559	.553	.547	.541	.535	.529
78	.660	.655	.649	.643	.637	.631	.625	.619	.613	.607	.601	.596	.590	.584	.578	.572	.566	.560
79	.682	.686	.680	.675	.669	.663	.657	.651	.645	.639	.633	.627	.622	.616	.610	.604	.598	.592
80	.726	.719	.713	.707	.701	.695	.690	.684	.678	.672	.666	.660	.654	.648	.642	.636	.631	.625
81	.759	.753	.747	.741	.735	.729	.723	.717	.711	.706	.700	.694	.688	.682	.676	.670	.664	.658
82	.793	.787	.782	.776	.770	.764	.758	.752	.746	.740	.734	.728	.722	.717	.711	.705	.699	.693

TABLE IX,

For finding the Relative Humidity of the Air from the readings of the dry t and wet bulb t' thermometers, at the mean barometric pressure of 25.8 inches.

Wet bulb t'	VALUES OF $t - t'$ IN DEGREES, FAHRENHEIT.														
	0	0.5	1	1.5	2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7
23	100	94	88	82	76	71	66	61	56	52	47	43	39	35	31
24	100	94	88	83	77	72	67	62	57	53	48	44	40	36	33
25	100	94	88	83	78	73	68	63	58	54	50	46	42	38	35
26	100	94	89	83	78	73	69	64	59	55	51	47	44	40	36
27	100	94	89	81	79	74	69	65	60	56	52	49	45	42	38
28	100	94	89	81	79	75	70	66	62	58	54	50	46	43	40
29	100	94	89	81	80	75	71	67	63	59	55	51	48	44	41
30	100	94	89	85	80	76	72	68	64	60	56	53	49	46	43
31	100	95	90	85	81	76	72	68	65	61	57	54	51	47	44
32	100	95	90	85	81	77	73	69	64	60	56	53	50	46	43
33	100	95	90	86	81	77	73	69	65	61	57	54	51	48	44
34	100	95	90	86	82	78	74	70	66	62	58	55	52	49	46
35	100	95	91	86	82	78	74	70	67	63	59	56	53	50	47
36	100	95	91	87	83	79	75	71	67	64	60	57	54	51	48
37	100	95	91	87	83	79	75	72	68	65	61	58	55	52	49
38	100	95	91	87	83	79	76	72	69	65	62	59	56	53	50
39	100	95	91	87	84	80	76	73	69	66	63	60	57	54	51
40	100	96	92	88	84	80	77	73	70	67	64	61	58	55	52
41	100	96	92	88	85	81	77	74	71	68	65	62	59	56	53
42	100	96	92	88	85	81	78	74	71	68	65	62	60	57	54
43	100	96	92	88	85	81	78	75	72	69	66	63	60	57	55
44	100	96	92	89	85	82	79	75	72	69	66	64	61	58	55
45	100	96	92	89	86	82	79	76	73	70	67	64	62	59	56
46	100	96	92	89	86	83	80	76	73	71	68	65	62	60	57
47	100	96	93	89	86	83	80	77	74	71	68	66	63	61	58
48	100	96	93	90	86	83	80	77	75	71	69	66	64	61	59
49	100	96	93	90	87	84	81	78	75	72	69	67	65	63	60
50	100	96	93	90	87	84	81	78	75	72	70	67	65	63	61
51	100	97	93	90	87	84	81	78	76	73	70	68	66	64	61
52	100	97	93	90	87	85	82	79	76	73	71	68	66	64	62

TABLE IX,

For finding the Relative Humidity of the Air from the readings of the dry t and wet bulb t' thermometers, at the mean barometric pressure of 25.8 inches—(continued).

Wet bulb t'	VALUES OF $t-t'$ IN DEGREES, FAHRENHEIT.																	
	7.5	8	8.5	9	9.5	10	10.5	11	11.5	12	12.5	13	13.5	14	14.5	15	15.5	16
23	27	21	20	17	14	11	8	5	2									
24	29	20	22	19	16	13	10	8	5	3								
25	31	28	24	21	18	16	13	10	8	5	3	1						
26	33	29	26	23	20	18	15	13	10	8	5	3	1					
27	35	31	28	26	22	20	17	15	12	10	8	6	3	1				
28	36	33	30	27	24	22	19	17	14	12	10	8	6	4	2			
29	38	35	32	29	26	24	21	19	16	14	12	10	8	6	4	2		
30	40	37	34	31	28	26	23	21	18	16	14	12	10	8	6	4	2	1
31	41	38	35	33	30	28	25	23	20	18	16	14	12	10	8	6	4	3
32	40	37	34	31	28	26	23	21	18	16	14	12	10	8	6	4	2	
33	41	38	35	33	30	27	25	22	20	18	16	14	12	10	8	6	4	2
34	43	40	37	34	31	29	26	24	22	20	18	16	14	11	10	8	6	4
35	44	41	38	35	33	30	28	25	23	21	19	17	15	13	11	10	8	6
36	45	42	39	37	34	32	30	27	25	23	21	19	17	15	13	11	10	8
37	46	43	41	38	36	33	31	29	27	25	22	20	19	17	15	13	11	10
38	47	45	42	39	37	35	32	30	28	26	24	22	20	18	17	15	13	11
39	49	46	43	41	38	36	34	32	30	27	25	24	22	20	18	17	15	12
40	49	47	44	42	40	37	35	33	31	29	27	25	23	21	20	18	16	13
41	50	48	45	43	41	39	36	34	32	30	28	26	25	23	21	19	18	14
42	51	49	46	44	42	40	38	36	34	31	30	28	26	24	23	21	19	15
43	52	50	47	45	43	41	39	37	35	33	31	29	27	25	24	22	21	19
44	53	51	48	46	44	42	40	38	36	34	32	30	28	27	25	24	22	21
45	54	52	49	47	45	43	41	39	37	35	33	31	30	28	27	25	24	22
46	55	53	50	48	46	44	42	40	38	36	34	33	31	29	28	26	25	23
47	56	53	51	49	47	45	43	41	39	37	35	34	32	30	29	27	26	24
48	57	54	52	50	48	46	44	42	40	38	36	35	33	32	30	29	27	26
49	58	55	53	51	49	47	45	43	41	39	37	36	34	33	31	30	28	27
50	59	56	54	52	50	48	46	44	42	40	38	37	35	34	32	31	29	28
51	59	57	55	53	51	49	47	45	43	41	39	38	36	35	33	32	30	29
52	60	57	56	53	51	49	48	46	44	42	40	39	37	36	34	33	31	30

TABLE IX,

For finding the Relative Humidity of the Air from the readings of the dry t and wet bulb t' thermometers, at the mean barometric pressure of 25.8 inches—(continued).

Wet bulb t'	VALUES OF $t-t'$ IN DEGREES, FAHRENHEIT.																		
	16.5	17	17.5	18	18.5	19	19.5	20	20.5	21	21.5	22	22.5	23	23.5	24	24.5	25	
23																			
24																			
25																			
26																			
27																			
28																			
29																			
30																			
31	1																		
32																			
33	1																		
34	2	1																	
35	4	3	1																
36	6	5	3	2	1														
37	8	7	5	4	3	1													
38	10	9	7	6	4	3	2	1											
39	12	10	9	7	6	5	4	2	1										
40	13	12	11	9	8	7	5	4	3	2	1								
41	15	13	12	11	9	8	7	6	5	3	2	1							
42	16	15	13	12	11	9	8	7	6	5	4	3	2	1					
43	18	16	15	14	12	11	10	9	8	7	6	5	4	3	2	1			
44	19	18	16	15	14	13	11	10	9	8	7	6	5	4	3	2	1		
45	21	19	18	16	15	14	13	12	10	9	8	7	7	6	5	4	3	2	
46	22	20	19	18	16	15	14	13	12	11	10	9	8	7	6	5	4	3	
47	23	21	20	19	18	17	15	14	13	12	11	10	9	8	7	6	5	4	
48	24	23	21	20	19	18	17	16	15	14	12	11	10	9	8	7	6	5	
49	25	24	23	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	
50	26	25	24	23	21	20	19	18	17	16	15	14	13	12	11	10	9	8	
51	28	26	25	24	23	21	20	19	18	17	16	15	14	13	12	11	10	9	
52	29	27	26	25	23	22	21	20	19	18	17	16	15	14	13	12	11	10	

TABLE IX,

For finding the Relative Humidity of the Air from the readings of the dry and wet bulb t' thermometers, at the mean barometric pressure of 25.8 inches—(continued).

Wet bulb t'	VALUES OF $t-t'$ IN DEGREES, FAHRENHEIT.																	
	25.5	26	26.5	27	27.5	28	28.5	29	29.5	30	30.5	31	31.5	32	32.5	33	33.5	34
23																		
24																		
25																		
26																		
27																		
28																		
29																		
30																		
31																		
32																		
33																		
34																		
35																		
36																		
37																		
38																		
39																		
40																		
41																		
42																		
43																		
44																		
45	1	1		1		1												
46	3	2	1	1		1												
47	4	3	3	2	1	1												
48	5	5	4	3	2	2	1	1		1	1							
49	7	6	5	4	4	3	2	2	1	1								
50	8	7	6	6	5	4	4	3	2	2	1	1						
51	9	8	7	7	6	5	5	4	4	3	2	2	1	1				
52	10	9	9	8	7	7	6	5	5	4	4	3	2	2	1	1		

TABLE IX.

For finding the Relative Humidity of the Air from the readings of the dry t and wet bulb t' thermometers, at the mean barometric pressure of 25.8 inches—(continued).

Wet bulb t'	VALUES OF $t-t'$ IN DEGREES, FAHRENHEIT.														
	0	0.5	1	1.5	2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7
63	100	97	94	91	88	85	83	79	77	74	71	69	67	65	62
51	100	97	94	91	88	85	82	79	77	74	72	69	67	65	63
55	100	97	94	91	88	85	83	80	77	75	72	70	68	66	63
56	100	97	94	91	88	86	83	80	78	75	73	71	68	66	64
57	100	97	94	91	88	86	83	80	78	76	73	71	69	67	65
58	100	97	94	91	89	86	83	81	78	76	74	73	69	67	65
60	100	97	94	92	89	86	84	81	79	77	74	73	70	68	66
60	100	97	94	92	89	87	84	81	79	77	75	73	70	68	66
61	100	97	94	92	89	87	84	82	79	77	75	73	71	69	67
62	100	97	94	92	89	87	84	82	80	78	76	73	71	69	67
63	100	97	94	92	89	87	85	82	80	78	76	74	72	70	68
61	100	97	94	92	90	87	85	83	80	78	76	74	72	70	68
65	100	97	95	92	90	87	85	83	81	79	77	74	72	70	68
68	100	97	95	92	90	88	85	83	81	79	77	75	73	71	69
67	100	97	95	93	90	88	86	83	81	79	77	75	73	71	69
68	100	97	95	93	90	88	86	84	81	79	77	75	73	72	70
69	100	97	95	93	90	88	86	84	82	80	78	76	74	72	70
70	100	97	95	93	90	88	86	84	82	80	78	76	74	72	70
71	100	98	95	93	91	88	86	84	82	80	78	76	74	73	71
72	100	98	95	93	91	89	86	84	82	80	78	76	75	73	71
73	100	98	95	93	91	89	87	84	82	81	79	77	75	73	71
74	100	98	95	93	91	89	87	85	83	81	79	77	75	73	72
75	100	98	95	93	91	89	87	85	83	81	79	77	75	74	72
76	100	98	95	93	91	89	87	85	83	81	79	77	76	74	72
77	100	98	95	93	91	89	87	85	83	81	80	78	76	74	72
78	100	98	96	93	91	89	87	85	83	82	80	78	76	74	73
79	100	98	96	94	91	89	87	85	84	82	80	78	76	74	73
80	100	98	96	94	92	90	88	86	84	82	80	78	77	75	73
81	100	98	96	94	92	90	88	86	84	82	80	78	77	75	73
82	100	98	96	94	92	90	88	86	84	82	80	78	77	75	74

TABLE IX,

For finding the Relative Humidity of the Air from the readings of the dry t and wet bulb t' thermometers, at the mean barometric pressure of 25.8 inches—(continued).

Wet bulb t'	VALUES OF $t-t'$ IN DEGREES, FAHRENHEIT.																	
	75	8	8.5	9	9.5	10	10.5	11	11.5	12	12.5	13	13.5	14	14.5	15	15.5	16
53	60	58	56	54	52	50	48	47	45	43	41	40	38	37	35	34	32	31
54	61	59	57	55	53	51	49	47	46	44	42	41	39	38	36	35	33	32
55	61	59	57	55	53	52	50	48	46	45	43	41	40	38	37	36	34	33
56	62	60	58	56	54	52	51	49	47	45	44	42	40	39	38	37	35	34
57	62	60	58	56	55	53	51	49	48	46	44	43	41	40	39	37	36	35
58	63	61	59	57	55	54	52	50	48	47	45	43	42	41	39	38	37	36
59	64	62	60	58	56	54	52	51	49	48	46	45	43	42	40	39	37	36
60	64	62	60	58	57	55	53	51	50	48	47	45	44	42	41	40	38	37
61	65	63	61	59	57	56	54	52	51	49	47	46	44	43	42	40	39	38
62	65	63	61	59	58	56	55	53	51	50	48	47	45	44	42	41	40	39
63	66	64	62	60	58	57	55	54	52	50	49	48	46	45	43	42	41	39
64	66	64	62	60	59	57	56	54	53	51	50	48	47	45	44	43	41	40
65	67	65	63	61	59	58	56	55	53	52	50	49	47	46	45	43	42	41
66	67	65	63	61	60	58	57	55	54	52	51	49	48	47	45	44	43	42
67	68	66	64	62	60	59	57	56	54	53	51	50	49	47	46	45	44	43
68	68	66	64	62	61	59	58	56	55	53	52	51	49	48	46	45	44	43
69	68	66	65	63	61	60	58	57	55	54	52	51	50	48	47	46	45	43
70	69	67	65	63	62	60	59	57	56	54	53	52	50	49	48	46	45	44
71	69	67	65	64	62	61	59	58	56	55	53	52	51	50	48	47	46	45
72	69	68	66	64	63	61	60	58	57	55	54	53	51	50	49	47	46	45
73	70	68	66	65	63	62	60	59	57	56	54	53	52	51	49	48	47	46
74	70	68	67	65	63	62	61	59	58	56	55	54	52	51	50	48	47	46
75	70	69	67	65	64	62	61	60	58	57	55	54	53	51	50	49	48	47
76	70	69	67	66	64	63	61	60	59	57	56	55	53	52	50	49	48	47
77	71	69	68	66	65	63	62	60	59	58	56	55	54	52	51	50	49	48
78	71	70	68	66	65	64	62	61	59	58	57	55	54	53	51	50	49	48
79	71	70	68	67	65	64	63	61	60	58	57	56	55	53	52	51	50	49
80	71	70	69	67	66	64	63	62	60	59	57	56	55	54	52	51	50	49
81	72	70	69	67	66	65	63	62	61	60	58	56	55	54	53	52	51	50
82	72	71	69	68	66	65	64	62	61	60	58	57	56	55	53	52	51	50

TABLE IX,

For finding the Relative Humidity of the Air from the readings of the dry t and wet bulb t' thermometers, at the mean barometric pressure of 25.8 inches—(continued).

Wet bulb t'	VALUES OF $t-t'$ IN DEGREES, FAHRENHEIT.																	
	16.5	17	17.5	18	18.5	19	19.5	20	20.5	21	21.5	22	22.5	23	23.5	24	24.5	25
53	30	28	27	26	24	23	22	21	20	19	18	17	16	15	15	14	13	12
54	31	29	28	27	25	24	23	22	21	20	19	18	17	16	16	15	14	13
55	32	30	29	28	26	25	24	23	22	21	20	19	18	17	17	16	15	14
56	33	31	30	29	27	26	25	24	23	22	21	20	19	18	18	17	16	15
57	33	32	31	30	28	27	26	25	24	23	22	21	20	19	19	18	17	16
58	34	33	32	31	29	28	27	26	25	24	23	22	21	20	20	19	18	17
59	35	34	33	32	30	29	28	27	26	25	24	23	22	21	21	20	19	18
60	36	35	33	32	31	30	29	28	27	26	25	24	23	22	22	21	20	19
61	37	36	34	33	32	31	30	29	28	27	26	25	24	23	22	22	21	20
62	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	22	21
63	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	22
64	39	38	37	36	35	34	32	31	30	29	28	27	26	25	25	24	23	22
65	40	38	37	36	35	34	33	32	31	30	29	28	27	26	25	25	24	23
66	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23
67	41	40	39	38	36	35	34	33	32	31	30	29	28	27	26	25	24	23
68	42	41	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24
69	42	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25
70	43	42	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26
71	43	42	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26
72	44	43	42	41	40	39	38	37	36	35	34	33	32	31	31	30	29	28
73	45	43	43	41	40	39	38	37	36	35	35	34	33	32	31	30	29	29
74	45	44	43	42	41	40	39	38	37	36	35	34	33	32	32	31	30	29
75	46	45	44	42	41	40	39	38	38	37	36	35	34	33	32	32	31	30
76	46	45	44	43	42	41	40	39	38	37	36	35	35	34	33	32	31	31
77	47	46	45	44	43	42	41	40	39	38	37	36	35	34	34	33	32	31
78	47	46	45	44	43	42	41	40	39	38	37	37	36	35	34	33	32	32
79	48	47	46	45	44	43	42	41	40	39	38	37	36	35	35	34	33	32
80	48	47	46	45	44	43	42	41	41	40	39	38	37	36	35	34	33	33
81	49	48	47	46	45	44	43	42	41	40	39	38	37	36	35	34	33	33
82	49	48	47	46	45	44	43	42	42	41	40	39	38	37	36	35	34	34

TABLE IX.

For finding the Relative Humidity of the Air from the readings of the dry t and wet bulb t' thermometers, at the mean barometric pressure of 25.8 inches—(concluded).

Wet bulb t' .	VALUES OF $t-t'$ IN DEGREES, FAHRENHEIT.																	
	25.5	26	26.5	27	27.5	28	28.5	29	29.5	30	30.5	31	31.5	32	32.5	33	33.5	34
53	12	11	10	9	8	8	7	6	6	5	5	4	4	3	3	2	2	1
54	13	12	11	10	10	9	8	8	7	6	6	5	5	4	4	3	3	2
55	14	13	12	11	11	10	9	9	8	7	7	6	6	5	5	4	4	3
56	15	14	13	12	12	11	10	10	9	8	8	7	7	6	6	5	5	4
57	16	15	14	13	13	12	11	11	10	9	9	8	8	7	7	6	6	5
58	17	16	15	14	14	13	12	12	11	10	10	9	9	8	8	7	7	6
59	17	17	16	15	14	14	13	12	12	11	11	10	10	9	9	8	8	7
60	18	18	17	16	15	15	14	13	13	12	12	11	11	10	10	9	8	8
61	19	18	18	17	16	16	15	14	14	13	13	12	11	11	10	10	9	9
62	20	19	18	18	17	16	16	15	15	14	13	13	12	12	11	11	10	10
63	21	20	19	19	18	17	17	16	16	15	14	14	13	12	12	11	11	10
64	21	21	20	20	19	18	18	17	16	16	15	15	14	13	13	12	12	11
65	22	22	21	20	20	19	18	18	17	16	16	15	15	14	14	13	12	12
66	23	22	22	21	20	20	19	18	18	17	16	16	15	15	14	14	13	13
67	24	23	22	22	21	20	20	19	19	18	17	17	16	16	15	14	14	13
68	25	24	23	23	22	21	20	20	19	19	18	17	17	16	16	15	14	14
69	25	25	24	23	23	22	21	20	20	19	19	18	18	17	16	16	15	15
70	26	25	25	24	23	23	22	21	21	20	19	19	18	18	17	17	16	16
71	26	26	25	25	24	23	23	22	21	21	20	19	19	18	18	17	17	16
72	27	27	26	25	24	24	23	23	22	21	21	20	19	19	18	18	17	17
73	28	27	27	26	25	24	24	23	23	22	21	21	20	20	19	19	18	18
74	28	28	27	26	26	25	24	24	23	23	22	21	21	20	20	19	19	18
75	29	28	28	27	26	26	25	24	24	23	23	22	21	21	20	20	19	19
76	30	29	28	28	27	26	26	25	24	24	23	23	22	21	21	20	20	19
77	30	30	29	28	28	27	26	26	25	24	24	23	23	22	21	21	20	20
78	31	30	29	29	28	27	27	26	26	25	24	24	23	23	22	21	21	20
79	31	31	30	29	29	28	27	27	26	26	25	24	24	23	23	22	22	21
80	32	32	31	30	29	29	28	27	27	26	25	25	24	24	23	23	22	22
81	33	32	31	30	29	29	28	28	27	27	26	25	25	24	24	23	23	22
82	33	33	32	31	30	30	29	28	28	27	26	26	25	25	24	24	23	23

TABLE X,

For finding the Tension of Vapour in the Air, in English inches, from the readings of the dry t and wet bulb t' thermometers, at the mean barometric pressure of 23.4 inches and in the latitude of 22°.

Wet bulb t' .	VALUES OF $t-t'$ IN DEGREES, FAHRENHEIT.																		
	0	0.5	1	1.5	2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9
15	.086	.082	.077	.073	.068	.063	.059	.051	.050	.045	.041	.036	.031	.027	.023	.018	.013	.008	.004
16	.090	.086	.081	.076	.072	.067	.063	.059	.053	.049	.044	.040	.035	.031	.026	.021	.017	.012	.008
17	.094	.090	.085	.080	.076	.071	.067	.062	.058	.053	.048	.044	.039	.035	.030	.025	.021	.016	.012
18	.098	.094	.089	.085	.080	.076	.071	.066	.062	.057	.053	.048	.043	.039	.034	.030	.025	.020	.016
19	.103	.098	.094	.089	.085	.080	.075	.071	.066	.062	.057	.052	.048	.043	.039	.034	.029	.025	.020
20	.108	.103	.098	.091	.089	.085	.080	.075	.071	.066	.062	.057	.052	.048	.043	.039	.034	.029	.025
21	.112	.108	.103	.099	.094	.089	.085	.080	.076	.071	.066	.062	.057	.053	.049	.043	.039	.034	.030
22	.117	.113	.108	.104	.099	.094	.090	.085	.081	.076	.071	.067	.062	.058	.053	.048	.044	.039	.034
23	.123	.118	.113	.109	.104	.100	.095	.090	.086	.081	.077	.072	.067	.063	.058	.053	.049	.044	.040
24	.128	.124	.119	.114	.110	.105	.100	.096	.091	.087	.082	.077	.073	.068	.064	.059	.054	.050	.045
25	.134	.129	.125	.120	.115	.111	.106	.102	.097	.092	.088	.083	.078	.074	.069	.065	.060	.055	.051
26	.140	.135	.131	.126	.121	.117	.112	.108	.103	.098	.094	.089	.084	.080	.075	.070	.066	.061	.057
27	.146	.141	.137	.132	.128	.123	.118	.114	.109	.104	.100	.095	.091	.086	.081	.077	.072	.067	.063
28	.153	.148	.143	.139	.134	.129	.125	.120	.116	.111	.106	.102	.097	.092	.088	.083	.078	.074	.069
29	.159	.155	.150	.145	.141	.136	.132	.127	.122	.118	.113	.108	.104	.099	.094	.090	.085	.081	.076
30	.166	.162	.157	.153	.148	.143	.139	.134	.129	.125	.120	.115	.111	.106	.102	.097	.092	.088	.083
31	.174	.169	.165	.160	.155	.151	.146	.141	.137	.132	.127	.123	.118	.113	.109	.104	.099	.095	.090
32	.182	.176	.171	.166	.161	.156	.151	.146	.141	.135	.130	.125	.120	.115	.110	.105	.100	.095	.090
33	.189	.184	.179	.173	.168	.163	.158	.153	.148	.143	.138	.133	.127	.122	.117	.112	.107	.102	.097
34	.197	.191	.186	.181	.176	.171	.166	.161	.155	.150	.145	.140	.135	.130	.125	.120	.114	.109	.104
35	.204	.199	.194	.189	.184	.179	.174	.168	.163	.158	.153	.148	.143	.138	.133	.127	.122	.117	.112
36	.213	.207	.202	.197	.192	.187	.182	.177	.171	.166	.161	.156	.151	.146	.141	.136	.130	.125	.120
37	.221	.216	.211	.206	.200	.195	.190	.185	.180	.175	.170	.165	.159	.154	.149	.144	.139	.134	.129
38	.230	.225	.219	.214	.209	.204	.199	.194	.189	.183	.178	.173	.168	.163	.158	.153	.147	.142	.137
39	.239	.234	.228	.223	.218	.213	.208	.203	.198	.192	.187	.182	.177	.172	.167	.162	.156	.151	.146
40	.248	.243	.238	.233	.228	.222	.217	.212	.207	.202	.197	.192	.186	.181	.176	.171	.166	.161	.156
41	.258	.253	.248	.242	.237	.232	.227	.222	.217	.211	.206	.201	.196	.191	.186	.180	.175	.170	.165
42	.268	.263	.258	.252	.247	.242	.237	.232	.227	.222	.216	.211	.206	.201	.196	.191	.186	.180	.175
43	.278	.273	.268	.263	.258	.252	.247	.242	.237	.232	.227	.221	.216	.211	.206	.201	.196	.190	.185
44	.289	.284	.279	.274	.268	.263	.258	.253	.248	.242	.237	.232	.227	.222	.217	.211	.206	.201	.196

TABLE X,

For finding the Tension of Vapour in the Air, in English inches, from the readings of the dry t and wet bulb t' thermometers, at the mean barometric pressure of 23.4 inches and in the latitude of 22°—(continued).

Wet bulb t'	VALUES OF $t - t'$ IN DEGREES, FAHRENHEIT.																	
	9.5	10	10.5	11	11.5	12	12.5	13	13.5	14	14.5	15	15.5	16	16.5	17	17.5	18
15																		
16	.003																	
17	.007	.002																
18	.011	.007	.002															
19	.016	.011	.008	.002														
20	.020	.016	.011	.008	.002													
21	.025	.020	.016	.011	.008	.002												
22	.030	.025	.021	.016	.011	.008	.002											
23	.035	.030	.026	.021	.017	.012	.007	.003										
24	.040	.036	.031	.027	.022	.017	.013	.008	.003									
25	.046	.041	.037	.032	.028	.023	.018	.014	.009	.004								
26	.052	.047	.043	.038	.034	.029	.024	.020	.015	.010	.006							
27	.058	.054	.049	.044	.040	.035	.030	.026	.021	.017	.012	.007						
28	.065	.060	.055	.051	.043	.041	.037	.032	.028	.023	.018	.014	.009	.004				
29	.071	.067	.062	.057	.053	.048	.043	.039	.034	.030	.025	.020	.016	.011	.006			
30	.078	.074	.069	.064	.060	.055	.050	.046	.041	.037	.032	.027	.023	.018	.013	.009	.004	
31	.086	.081	.076	.072	.067	.062	.058	.053	.048	.044	.039	.034	.030	.025	.021	.016	.011	.007
32	.094	.079	.074	.069	.064	.059	.054	.049	.043	.038	.033	.028	.023	.018	.013	.008	.003	
33	.092	.086	.081	.076	.071	.066	.061	.056	.051	.046	.040	.035	.030	.025	.020	.015	.010	.005
34	.099	.094	.089	.084	.079	.073	.068	.063	.058	.053	.048	.043	.038	.033	.027	.022	.017	.012
35	.107	.102	.097	.092	.086	.081	.076	.071	.066	.061	.056	.051	.045	.040	.035	.030	.025	.020
36	.115	.110	.105	.100	.094	.089	.084	.079	.074	.069	.064	.059	.053	.048	.043	.038	.033	.028
37	.123	.118	.113	.108	.103	.098	.093	.087	.082	.077	.072	.067	.062	.057	.051	.046	.041	.036
38	.132	.127	.122	.117	.111	.106	.101	.096	.091	.086	.081	.075	.070	.065	.060	.055	.050	.045
39	.141	.136	.131	.126	.120	.115	.110	.105	.100	.095	.090	.084	.079	.074	.069	.064	.059	.053
40	.150	.145	.140	.135	.130	.125	.119	.114	.109	.104	.099	.094	.089	.083	.078	.073	.068	.063
41	.160	.155	.150	.144	.139	.134	.129	.124	.119	.113	.108	.103	.098	.093	.088	.083	.077	.072
42	.170	.165	.160	.154	.149	.144	.139	.134	.129	.123	.118	.113	.108	.103	.098	.092	.087	.082
43	.180	.175	.170	.165	.159	.154	.149	.144	.139	.134	.128	.123	.118	.113	.108	.103	.097	.092
44	.191	.186	.180	.175	.170	.165	.160	.155	.149	.144	.139	.134	.129	.124	.118	.113	.108	.103

TABLE X,

For finding the Tension of Vapour in the Air, in English inches, from the readings of the dry t and wet bulb t' thermometers, at the mean barometric pressure of 28.4 inches and in the latitude of 22°—(continued).

Wet bulb t' .	VALUES OF $t-t'$ IN DEGREES, FAHRENHEIT.																		
	0	0.5	1	1.5	2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9
45	'300	'295	'290	'285	'280	'274	'269	'264	'259	'254	'249	'243	'238	'233	'228	'223	'218	'212	'207
46	'312	'307	'301	'296	'291	'286	'291	'275	'270	'265	'260	'255	'250	'244	'239	'234	'229	'224	'218
47	'324	'318	'313	'308	'303	'298	'292	'287	'282	'277	'272	'266	'261	'256	'251	'246	'241	'236	'230
48	'336	'331	'325	'320	'315	'310	'305	'300	'294	'289	'284	'279	'274	'268	'263	'258	'253	'248	'242
49	'349	'343	'338	'333	'328	'323	'317	'312	'307	'302	'297	'291	'286	'281	'276	'271	'265	'260	'255
50	'362	'357	'351	'346	'341	'336	'331	'325	'320	'315	'310	'305	'309	'304	'299	'284	'279	'273	'268
51	'375	'370	'365	'360	'354	'349	'344	'339	'334	'328	'323	'318	'313	'308	'302	'297	'292	'287	'282
52	'389	'384	'379	'374	'368	'363	'358	'353	'348	'342	'337	'332	'327	'322	'316	'311	'306	'301	'296
53	'404	'399	'393	'388	'383	'378	'372	'367	'362	'357	'352	'346	'341	'336	'331	'326	'320	'315	'310
54	'419	'413	'408	'403	'398	'393	'387	'382	'377	'372	'367	'361	'356	'351	'346	'340	'335	'330	'325
55	'434	'429	'424	'418	'413	'408	'403	'398	'392	'387	'382	'377	'371	'366	'361	'356	'351	'345	'340
56	'450	'445	'440	'434	'429	'424	'419	'413	'408	'403	'398	'393	'387	'382	'377	'372	'366	'361	'356
57	'467	'461	'456	'451	'446	'440	'435	'430	'425	'420	'414	'409	'404	'399	'393	'388	'383	'378	'372
58	'484	'478	'473	'468	'463	'457	'452	'447	'442	'436	'431	'426	'421	'415	'410	'405	'400	'395	'389
59	'501	'496	'491	'485	'480	'475	'470	'464	'459	'454	'449	'443	'438	'433	'428	'422	'417	'412	'407
60	'519	'514	'509	'504	'498	'493	'488	'483	'477	'472	'467	'462	'456	'451	'446	'441	'435	'430	'425
61	'538	'533	'527	'522	'517	'512	'506	'501	'496	'491	'485	'480	'475	'470	'464	'459	'454	'449	'443
62	'557	'552	'547	'541	'536	'531	'526	'520	'515	'510	'505	'500	'494	'489	'484	'478	'473	'468	'463
63	'577	'572	'567	'561	'556	'551	'546	'540	'535	'530	'525	'519	'514	'509	'503	'498	'493	'488	'482
64	'598	'592	'587	'582	'577	'571	'566	'561	'555	'550	'545	'540	'534	'529	'524	'519	'513	'508	'503
65	'619	'613	'608	'603	'598	'592	'587	'582	'577	'571	'566	'561	'555	'550	'545	'540	'534	'529	'524
66	'641	'635	'630	'625	'619	'614	'609	'604	'598	'593	'587	'582	'577	'571	'566	'561	'555	'550	'545
67	'663	'658	'653	'647	'642	'637	'631	'626	'621	'616	'610	'605	'600	'594	'589	'584	'579	'573	'568
68	'686	'681	'676	'670	'665	'660	'655	'649	'644	'639	'633	'629	'623	'618	'612	'607	'602	'596	'591
69	'710	'705	'700	'694	'689	'684	'678	'673	'668	'662	'657	'652	'647	'641	'636	'631	'625	'620	'615
70	'735	'730	'724	'719	'714	'708	'703	'698	'692	'687	'682	'677	'671	'666	'661	'655	'650	'645	'639
71	'760	'755	'750	'744	'739	'734	'728	'723	'718	'712	'707	'702	'697	'691	'686	'681	'675	'670	'665
72	'786	'781	'776	'770	'765	'760	'755	'749	'744	'739	'733	'728	'723	'717	'712	'706	'701	'696	'691
73	'813	'808	'803	'797	'792	'787	'781	'776	'771	'765	'760	'755	'749	'744	'739	'733	'728	'723	'718
74	'841	'836	'830	'825	'820	'814	'809	'804	'798	'793	'788	'783	'777	'772	'767	'761	'756	'750	'745
75	'870	'864	'859	'854	'848	'843	'838	'832	'827	'822	'816	'811	'806	'800	'795	'790	'784	'779	'774

TABLE X,

For finding the Tension of Vapour in the Air, in English inches, from the readings of the dry t and wet bulb t' thermometers, at the mean barometric pressure of 23.4 inches and in the latitude of 22°—(concluded).

Wet bulb t' .	VALUES OF $t-t'$ IN DEGREES, FAHRENHEIT.																	
	9.5	10	10.5	11	11.5	12	12.5	13	13.5	14	14.5	15	15.5	16	16.5	17	17.5	18
45	202	197	192	186	181	176	171	166	161	155	150	145	140	135	130	124	119	114
46	213	208	203	198	193	187	182	177	172	167	161	156	151	146	141	136	130	125
47	225	220	215	209	204	199	194	189	184	178	173	168	163	158	152	147	142	137
48	237	232	227	222	216	211	206	201	196	191	185	180	175	170	165	160	154	149
49	250	245	240	234	229	224	219	214	208	203	198	193	188	182	177	172	167	162
50	263	258	253	247	242	237	232	227	221	216	211	206	201	195	190	185	180	175
51	276	271	266	261	256	250	245	240	235	230	224	219	214	209	204	198	193	189
52	290	285	280	275	269	264	259	254	249	243	238	233	228	223	217	212	207	202
53	305	299	294	289	284	279	273	268	263	258	253	247	242	237	232	226	221	216
54	320	314	309	304	299	293	288	283	278	273	267	262	257	252	246	241	236	231
55	335	333	324	319	314	309	304	298	293	288	283	277	272	267	262	257	251	246
56	351	346	340	335	330	325	319	314	309	304	298	293	288	283	278	272	267	262
57	367	362	357	351	346	341	336	331	325	320	315	310	304	299	294	289	283	278
58	384	379	374	368	363	358	353	347	342	337	332	326	321	316	311	305	300	295
59	402	396	391	386	381	375	370	365	360	354	349	344	339	333	328	323	318	312
60	420	414	409	404	399	393	388	383	378	372	367	362	357	351	346	341	339	330
61	438	433	428	422	417	412	407	401	396	391	386	380	375	370	365	359	351	349
62	457	452	447	442	436	431	426	420	415	410	405	400	394	389	384	378	373	368
63	477	472	467	461	456	451	446	440	435	430	425	419	414	409	403	398	393	388
64	498	492	487	482	476	471	466	461	455	450	445	440	434	429	424	418	413	408
65	519	513	508	503	497	492	487	482	476	471	466	461	455	450	445	439	434	429
66	539	534	529	524	518	513	508	502	497	492	486	481	476	470	465	460	454	449
67	563	557	552	547	542	536	531	526	520	515	510	505	500	494	488	483	478	472
68	586	581	575	570	565	559	554	549	543	538	533	528	522	517	512	506	501	496
69	610	604	599	594	588	583	578	573	567	562	557	551	546	541	535	530	525	520
70	634	629	624	618	613	608	602	597	592	586	581	576	571	565	560	555	549	544
71	659	654	649	644	638	633	628	622	617	612	606	601	596	590	585	580	575	569
72	685	680	675	670	664	659	654	648	643	638	632	627	622	616	611	606	601	595
73	712	707	702	698	691	686	680	675	670	665	659	654	649	643	638	633	627	622
74	740	735	729	724	719	713	708	703	697	692	687	681	676	671	666	660	655	650
75	768	763	758	752	747	742	737	731	726	721	715	710	705	700	694	689	683	678

TABLE XI,

For finding the Relative Humidity of the Air from the readings of the dry t and wet bulb t' thermometers, at the mean barometric pressure of 23.4 inches.

Wet bulb t'	VALUES OF $t-t'$ IN DEGREES, FAHRENHEIT.																		
	0	0.5	1	1.5	2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9
15	100	93	86	79	72	66	60	54	49	42	38	33	28	23	19	15	11	7	3
16	100	93	86	79	73	67	62	56	49	44	39	35	30	25	21	17	13	10	6
17	100	94	87	80	71	68	62	57	52	46	41	36	32	27	23	19	16	12	9
18	100	94	87	80	74	69	63	58	53	48	43	38	34	29	25	22	18	15	11
19	100	94	87	81	75	70	64	59	54	49	45	40	36	31	28	24	20	17	14
20	100	94	88	82	76	70	65	60	55	51	46	42	37	33	29	26	22	19	16
21	100	94	88	82	76	71	66	61	57	52	47	43	39	35	31	28	25	21	18
22	100	94	88	83	77	72	67	62	58	53	49	45	41	37	33	30	27	23	20
23	100	94	88	83	78	73	68	63	59	54	50	46	42	39	35	32	28	25	22
24	100	95	89	84	78	74	69	64	59	55	52	48	44	40	37	33	30	27	24
25	100	95	89	84	79	74	69	65	61	57	53	49	45	41	38	35	32	29	26
26	100	95	90	85	79	75	70	66	62	58	54	50	46	43	40	37	34	31	28
27	100	95	90	85	80	76	71	67	63	59	55	51	48	44	41	38	35	32	30
28	100	95	90	85	81	76	72	68	64	60	56	53	49	46	43	40	36	34	31
29	100	95	90	86	81	77	73	69	65	61	57	54	51	47	44	41	38	35	33
30	100	95	90	86	82	77	74	69	65	62	59	55	52	49	46	43	40	37	35
31	100	95	91	87	82	78	74	70	67	63	60	56	53	50	47	44	41	38	36
32	100	95	89	86	82	78	74	70	66	62	59	55	52	49	46	43	40	38	35
33	100	95	90	86	82	78	74	71	67	63	60	56	53	50	47	44	42	39	37
34	100	95	90	87	83	79	75	71	68	64	61	57	54	51	48	45	43	40	38
35	100	96	91	87	83	79	76	72	68	65	62	58	55	52	49	47	44	41	39
36	100	96	91	87	83	80	76	73	69	66	62	59	56	53	50	48	45	42	40
37	100	96	91	88	84	80	77	73	70	67	63	60	57	54	51	49	46	43	41
38	100	96	92	88	84	81	77	74	70	67	64	61	58	55	52	50	47	44	42
39	100	96	92	88	84	81	78	74	71	68	65	62	59	56	53	51	48	46	43
40	100	96	92	88	85	81	78	75	72	68	66	63	60	57	54	52	49	47	44
41	100	96	92	89	85	82	78	75	72	69	66	64	61	58	55	53	50	48	45
42	100	96	92	89	85	82	79	76	73	70	67	64	62	59	56	53	51	49	46
43	100	96	93	89	86	82	79	76	73	70	68	65	62	60	57	54	52	50	47
44	100	96	93	89	86	83	80	77	74	71	68	65	63	60	58	55	53	50	48

TABLE XI,

For finding the Relative Humidity of the Air from the readings of the dry t and wet bulb t' thermometers, at the mean barometric pressure of 23.4 inches—(continued).

Wet bulb t' .	VALUES OF $t-t'$ IN DEGREES, FAHRENHEIT.																	
	9.5	10	10.5	11	11.5	12	12.5	13	13.5	14	14.5	15	15.5	16	16.5	17	17.5	18
15	1																	
16	2																	
17	5	1																
18	7	5	1															
19	10	7	4	1														
20	12	9	6	3	1													
21	15	12	9	6	3	1												
22	17	14	11	8	6	3	1											
23	19	16	13	11	8	6	3	1										
24	21	18	15	13	10	8	6	4	1									
25	23	20	18	15	13	10	8	6	4	2								
26	25	22	20	17	15	13	11	8	6	4	2							
27	27	24	22	19	17	15	13	11	9	7	5	3						
28	29	26	24	21	19	17	15	13	11	9	7	5	3	1				
29	30	28	25	23	21	19	17	15	13	11	9	7	5	4	2			
30	32	30	27	25	23	21	19	17	15	13	11	9	8	6	4	3		
31	33	31	29	27	24	22	20	18	16	15	13	11	9	8	6	5	3	2
32	32	30	27	24	22	20	18	16	14	12	10	8	6	5	3	2	5	
33	34	31	29	26	24	22	20	18	16	14	12	10	9	7	5	4	2	1
34	35	33	30	28	25	23	21	20	18	16	14	12	11	9	7	6	4	3*
35	36	34	32	29	27	25	23	21	19	18	16	14	12	11	9	8	6	5
36	37	35	33	31	28	26	23	21	19	17	16	14	13	11	10	8	6	
37	39	36	34	32	30	28	26	24	22	21	19	17	16	14	13	11	9	8
38	40	38	36	33	31	29	27	26	24	22	20	19	17	16	14	13	11	10
39	41	39	37	35	32	31	29	27	25	24	22	20	19	17	16	14	13	11
40	42	40	38	36	34	32	30	29	27	25	23	22	20	18	17	16	14	13
41	43	41	39	37	35	33	31	30	28	26	25	23	22	20	18	17	16	14
42	44	42	40	38	36	34	33	31	29	28	26	24	23	21	20	18	17	16
43	45	43	41	39	37	35	34	32	30	29	27	25	24	22	21	20	18	17
44	46	44	42	40	38	37	35	33	31	30	28	27	25	24	22	21	20	18

TABLE XI,

For finding the Relative Humidity of the Air from the readings of the dry t and wet bulb t' thermometers, at the mean barometric pressure of 23·4 inches—(continued).

Wet bulb t' .	VALUES OF $t-t'$ IN DEGREES, FAHRENHEIT.																		
	0	0·5	1	1·5	2	2·5	3	3·5	4	4·5	5	5·5	6	6·5	7	7·5	8	8·5	9
45	100	96	93	90	86	83	80	77	74	71	69	66	63	61	59	56	54	51	49
46	100	96	93	90	87	83	80	77	75	72	69	67	64	61	59	57	55	52	50
47	100	96	93	90	87	81	81	78	75	72	70	67	65	62	60	57	55	53	51
48	100	97	93	90	87	81	81	78	75	73	70	68	65	63	61	59	56	54	52
49	100	97	93	90	87	81	81	79	76	73	71	68	66	64	61	59	57	54	52
50	100	97	93	91	88	85	82	79	76	74	71	69	66	64	62	60	58	55	53
51	100	97	94	91	88	85	82	79	77	74	72	69	67	65	62	60	59	56	54
52	100	97	94	91	88	85	82	80	77	75	72	70	67	65	63	61	59	57	55
53	100	97	94	91	88	85	83	80	78	75	73	70	68	66	64	62	60	57	54
54	100	97	94	91	88	86	83	80	78	76	73	71	68	66	64	62	60	58	56
55	100	97	94	91	88	86	83	81	78	76	74	71	69	67	65	63	61	59	57
56	100	97	94	91	89	86	83	81	79	76	74	72	69	67	65	63	61	59	57
57	100	97	94	92	89	86	84	81	79	77	74	72	70	67	66	64	62	60	58
58	100	97	94	92	89	86	84	81	79	77	75	72	70	68	66	64	62	60	58
59	100	97	94	92	89	87	84	82	79	77	75	73	71	69	67	65	63	61	59
60	100	97	95	92	89	87	81	82	80	77	75	73	71	69	67	65	63	61	60
61	100	97	95	92	90	87	81	82	80	78	76	73	71	70	68	66	64	62	60
62	100	97	95	92	90	87	85	82	80	78	76	74	72	70	68	66	64	62	61
63	100	97	95	92	90	87	85	83	80	78	76	74	72	70	68	67	65	63	61
64	100	97	95	92	90	88	85	83	81	78	77	74	73	71	69	67	65	63	62
65	100	97	95	92	90	88	86	83	81	79	77	75	73	71	69	67	66	64	62
66	100	97	95	92	90	88	86	83	81	79	77	75	73	71	70	68	66	64	63
67	100	97	95	93	90	88	86	84	81	79	78	76	74	72	70	68	67	65	63
68	100	97	95	93	90	88	86	84	82	79	78	76	74	72	70	69	67	65	63
69	100	97	95	93	91	88	86	84	82	80	78	76	74	72	71	69	67	66	64
70	100	98	95	93	91	89	86	84	82	80	78	76	75	73	71	69	68	66	64
71	100	98	95	93	91	89	86	84	82	80	78	77	76	73	71	70	68	66	65
72	100	98	95	93	91	89	87	85	82	80	79	77	75	73	72	70	68	67	65
73	100	98	96	93	91	89	87	85	83	81	79	77	75	74	72	70	69	67	65
74	100	98	96	93	91	89	87	85	83	81	79	77	76	74	72	71	69	67	66
75	100	98	96	93	91	89	87	85	83	81	80	78	76	74	72	71	69	68	66

TABLE XI,

For finding the Relative Humidity of the Air from the readings of the dry t and wet bulb t' thermometers, at the mean barometric pressure of 23·4 inches—(concluded).

Wet bulb t' .	VALUES OF $t-t'$ IN DEGREES, FAHRENHEIT.																	
	9·5	10	10·5	11	11·5	12	12·5	13	13·5	14	14·5	15	15·5	16	16·5	17	17·5	18
45	47	45	43	41	39	38	36	34	33	31	29	28	27	25	24	22	21	20
46	48	46	44	42	40	39	37	35	34	32	30	29	28	26	25	24	22	21
47	49	47	45	43	41	40	38	36	35	33	32	30	29	27	26	25	23	22
48	50	48	46	44	42	41	39	37	36	34	33	31	30	28	27	26	24	23
49	51	49	47	45	43	42	40	38	37	35	34	32	31	29	28	27	25	24
50	51	50	48	46	44	43	41	39	38	36	35	33	32	31	29	28	27	25
51	52	50	49	47	45	43	42	40	39	37	36	34	33	32	30	29	28	26
52	53	51	50	48	46	44	43	41	40	38	37	35	34	32	31	30	29	27
53	53	52	50	49	47	45	44	42	41	39	38	36	35	33	32	31	30	28
54	54	53	51	49	48	46	45	43	41	40	39	37	36	34	33	32	31	29
55	55	53	51	50	48	47	46	44	42	41	39	38	36	35	34	33	31	30
56	56	54	52	50	49	47	46	45	43	41	40	39	37	36	35	33	32	31
57	56	55	53	51	49	48	47	45	44	42	41	39	38	37	35	34	33	32
58	57	55	54	52	50	49	47	46	44	43	42	40	39	38	36	35	34	32
59	57	56	54	53	51	49	48	46	45	44	42	41	40	38	37	36	34	33
60	58	56	55	53	52	50	48	47	46	44	43	42	40	39	38	37	35	34
61	58	57	55	54	52	51	49	48	46	45	43	42	41	40	39	37	36	35
62	59	57	56	54	53	51	50	48	47	45	44	43	42	40	39	38	37	36
63	59	58	56	55	53	52	50	49	47	46	44	43	42	41	40	39	38	37
64	60	58	57	55	54	52	51	49	48	46	45	44	43	41	40	39	38	37
65	61	59	57	56	54	53	51	50	48	47	46	45	43	42	40	39	38	38
66	61	59	58	56	55	53	52	50	49	48	46	45	44	43	42	41	39	38
67	62	60	58	57	55	54	52	51	49	48	47	46	45	44	42	41	40	39
68	62	60	59	57	56	54	53	51	50	49	48	47	45	44	43	42	41	40
69	62	61	59	58	56	55	53	52	50	49	48	47	46	45	44	43	41	40
70	63	61	60	58	57	55	54	52	51	50	49	48	47	45	44	43	42	41
71	63	62	60	59	57	56	54	53	51	50	49	48	47	46	45	44	43	42
72	64	62	61	59	58	56	55	53	52	51	50	48	47	46	45	44	43	42
73	64	63	61	60	58	57	55	54	53	52	50	49	48	47	46	45	44	43
74	64	63	61	60	59	57	56	55	53	52	51	50	49	47	46	45	44	43
75	65	63	62	60	59	58	56	55	54	53	52	50	49	48	47	46	45	44

TABLE XII,

For finding the Weight of Water Vapour, in Troy grains, in each cubic foot of air at each temperature, and for any given vapour tension p , as expressed in inches of mercury, in latitude 22° .

p.	TEMPERATURE OF AIR.												
	2°.	7°.	12°.	17°.	22°.	27°.	32°.	37°.	42°.	47°.	52°.	57°.	62°.
.001	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
.002	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
.003	0.04	0.04	0.04	0.04	0.04	0.04	0.03	0.03	0.03	0.03	0.03	0.03	0.03
.004	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
.005	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.05
.006	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07
.007	0.09	0.09	0.09	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08
.008	0.10	0.10	0.10	0.10	0.10	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
.009	0.11	0.11	0.11	0.11	0.11	0.11	0.10	0.10	0.10	0.10	0.10	0.10	0.10
.010	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.11	0.11	0.11	0.11	0.11
.020	0.25	0.25	0.24	0.24	0.24	0.24	0.23	0.23	0.23	0.23	0.22	0.22	0.22
.030	0.37	0.37	0.36	0.36	0.36	0.35	0.35	0.35	0.34	0.34	0.34	0.33	0.33
.040	0.50	0.49	0.49	0.48	0.48	0.47	0.47	0.46	0.46	0.45	0.45	0.44	0.44
.050	0.62	0.61	0.61	0.60	0.59	0.59	0.58	0.58	0.57	0.57	0.56	0.55	0.55
.060	0.74	0.74	0.73	0.73	0.71	0.71	0.70	0.69	0.69	0.68	0.67	0.67	0.66
.070	0.87	0.86	0.85	0.84	0.83	0.82	0.82	0.81	0.80	0.79	0.78	0.78	0.77
.080	0.99	0.98	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.90	0.90	0.89	0.88
.090	1.12	1.10	1.09	1.08	1.07	1.06	1.05	1.04	1.03	1.02	1.01	1.00	0.99
.100	1.24	1.23	1.21	1.20	1.19	1.18	1.16	1.15	1.14	1.13	1.12	1.11	1.10
.200	2.48	2.46	2.43	2.40	2.38	2.35	2.33	2.31	2.29	2.26	2.24	2.22	2.20
.300	3.72	3.68	3.64	3.61	3.57	3.53	3.49	3.46	3.43	3.39	3.36	3.33	3.30
.400	4.96	4.91	4.86	4.81	4.76	4.71	4.66	4.62	4.57	4.52	4.48	4.44	4.39
.500	6.21	6.14	6.07	6.01	5.95	5.89	5.82	5.77	5.71	5.66	5.60	5.55	5.49
.600	7.45	7.37	7.29	7.21	7.14	7.06	6.99	6.92	6.85	6.79	6.72	6.66	6.60
.700	8.69	8.59	8.50	8.41	8.33	8.24	8.16	8.08	8.00	7.92	7.84	7.76	7.69
.800	9.83	9.82	9.72	9.62	9.53	9.42	9.32	9.23	9.14	9.05	8.96	8.87	8.79
.900	11.17	11.05	10.93	10.82	10.71	10.60	10.48	10.38	10.28	10.18	10.08	9.98	9.89
1.000	12.41	12.28	12.15	12.02	11.90	11.77	11.65	11.54	11.42	11.31	11.20	11.09	10.99
2.000	21.82	21.56	21.30	21.04	23.79	23.55	23.30	23.08	22.84	22.62	22.40	22.18	21.97

TABLE XII,

For finding the Weight of Water Vapour, in Troy grains, in each cubic foot of air at each temperature, and for any given vapour tension p , as expressed in inches of mercury, in latitude 22° —(continued).

p .	TEMPERATURE OF AIR.												
	67°.	72°.	77°.	82°.	87°.	92°.	97°.	102°.	107°.	112°.	117°.	122°.	127°.
·001	0·01	0·01	0·01	0·01	0·01	0·01	0·01	0·01	0·01	0·01	0·01	0·01	0·01
·002	0·02	0·02	0·02	0·02	0·02	0·02	0·02	0·02	0·02	0·02	0·02	0·02	0·02
·003	0·03	0·03	0·03	0·03	0·03	0·03	0·03	0·03	0·03	0·03	0·03	0·03	0·03
·004	0·04	0·04	0·04	0·04	0·04	0·04	0·04	0·04	0·04	0·04	0·04	0·04	0·04
·005	0·05	0·05	0·05	0·05	0·05	0·05	0·05	0·05	0·05	0·05	0·05	0·05	0·05
·006	0·07	0·06	0·06	0·06	0·06	0·06	0·06	0·06	0·06	0·06	0·06	0·06	0·06
·007	0·08	0·08	0·07	0·07	0·07	0·07	0·07	0·07	0·07	0·07	0·07	0·07	0·07
·008	0·09	0·09	0·09	0·08	0·08	0·08	0·08	0·08	0·08	0·08	0·08	0·08	0·08
·009	0·10	0·10	0·10	0·10	0·09	0·09	0·09	0·09	0·09	0·09	0·09	0·09	0·09
·010	0·11	0·11	0·11	0·11	0·10	0·10	0·10	0·10	0·10	0·10	0·10	0·10	0·10
·020	0·22	0·22	0·21	0·21	0·21	0·21	0·21	0·20	0·20	0·20	0·20	0·20	0·20
·030	0·33	0·32	0·32	0·32	0·31	0·31	0·31	0·31	0·30	0·30	0·30	0·30	0·29
·040	0·44	0·43	0·43	0·42	0·42	0·42	0·41	0·41	0·40	0·40	0·40	0·39	0·39
·050	0·54	0·54	0·53	0·53	0·52	0·52	0·51	0·51	0·51	0·50	0·50	0·49	0·49
·060	0·65	0·65	0·64	0·63	0·63	0·62	0·62	0·61	0·61	0·60	0·60	0·59	0·59
·070	0·76	0·75	0·75	0·74	0·73	0·73	0·72	0·71	0·71	0·70	0·70	0·69	0·69
·080	0·87	0·86	0·85	0·85	0·84	0·83	0·82	0·82	0·81	0·80	0·80	0·79	0·78
·090	0·98	0·97	0·96	0·95	0·94	0·94	0·93	0·92	0·91	0·90	0·90	0·89	0·88
·100	1·09	1·08	1·07	1·06	1·05	1·04	1·03	1·02	1·01	1·00	0·99	0·99	0·98
·200	2·18	2·16	2·14	2·12	2·10	2·08	2·06	2·04	2·02	2·00	1·99	1·97	1·95
·300	3·26	3·23	3·20	3·17	3·15	3·12	3·09	3·06	3·03	3·01	2·98	2·96	2·93
·400	4·35	4·31	4·27	4·23	4·19	4·16	4·12	4·08	4·05	4·01	3·98	3·94	3·91
·500	5·44	5·39	5·34	5·29	5·24	5·20	5·15	5·10	5·06	5·01	4·97	4·93	4·89
·600	6·53	6·47	6·41	6·35	6·29	6·23	6·18	6·12	6·07	6·02	5·98	5·91	5·86
·700	7·62	7·55	7·48	7·41	7·34	7·27	7·21	7·14	7·08	7·02	6·98	6·90	6·84
·800	8·71	8·62	8·54	8·47	8·39	8·31	8·24	8·16	8·09	8·02	7·95	7·88	7·82
·900	9·79	9·70	9·61	9·52	9·44	9·35	9·27	9·19	9·10	9·03	8·95	8·87	8·79
1·000	10·88	10·78	10·68	10·59	10·49	10·39	10·30	10·21	10·12	10·03	9·91	9·86	9·77
2·000	21·77	21·56	21·36	21·16	20·97	20·78	20·59	20·41	20·23	20·06	19·98	19·71	19·54

